DOCUMENT RESUME

ED 222 377 SE 039 471

TITLE	Science and Engineering Degrees: 1950-80. A Source Book. Special Report.
INSTITUTION	National Science Foundation, Washington, D.C.
REPORT NO	NSF-82-307
PUB DATE	82
NOTE	71p.
AVAILABLE FROM	National Science Foundation, 1800 G Street, N.W., Washington, DC 20550 (no charge for single copies).
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	*Bachelors Degrees; *College Science; Computer Science; Degrees (Academic); *Doctoral Degrees; Educational Trends; *Engineering; Engineering Education; Engineers; Higher Education; *Masters Degrees; Mathematics; Science Education; *Sciences; Scientists; Sex Differences

ABSTRACT

This publication is a source book of detailed statistical information on science and engineering (S/E) degree production for the period 1950-1980. Data used in the report cover earned degrees in the aggregate United States, which includes the 50 states, District of Columbia, and its outlying areas (American Samoa, Canal Zone, Guam, Northern Marianas Island, Puerto Rico, the Virgin Islands, and the Trust Territory of the Pacific Islands). The first section consists of 15 charts (in graph format) with a summary statement at the bottom of each chart. The second section consists of 42 statistical tables. Data are reported for bachelor's, master's, and doctoral degrees for all fields, non-S/E fields, and S/E fields. The latter include chemistry, physics, geology, other physical sciences, engineering fields, mathematics, computer/information sciences, life sciences (agriculture/natural resources and biological sciences) and social sciences (psychology, economics, sociology, and other social sciences). Separate data are reported for S/E bachelor's, master's, and doctoral degrees earned by males and females. Data are also reported for the various S/E fields by academic level and sex over the 30-year period. A list of specific S/E fields included in the report is provided in an appendix. (JN)

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foreword

Information on science and engineering (S/E) degree production is vital to the understanding of the dynamics of labor markets in these fields. A statistical series providing this type of information (i.e., the annual number of students receiving S/E degrees) is an important leading indicator related to market conditions, providing early warning about future changes in supply. In addition, such a series can be used to detect changes in the characteristics of this new supply, such as the increasing share of these degrees being awarded to women. This publication is a new source book of detailed statistical information on S/E degree production for the period 1950-80, a period which seems to be most frequently analyzed. The source book will be updated periodically as new data become available.

Charles E. Falk
Director, Division of Science
Resources Studies
Directorate for Scientific, Technological,
and International Affairs

January 1982

acknowledgments

This publication was prepared by Felix H. Lindsay, Associate Study Director, under the supervision of Charles H. Dickens, Senior Study Director, Supply and Education Analysis Group, Division of Science Resources Studies.

General guidance and review were provided by Alan Fechter, Head, Scientific and Technical Personnel Studies Section, and Charles E. Falk, Director, Division of Science Resources Studies.

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general notes

This publication is based on data provided by other Federal agencies as part of their general statistics programs. The degree data were collected and provided by the National Center for Education Statistics (NCES), U.S. Department of Education, and its predecessors. Estimates of population in various age categories were published by the Bureau of the Census.

The data used in this report cover earned degrees conferred in the aggregate United States, which includes the 50 States, District of Columbia, and its outlying areas (American Samoa, the former Canal Zone, Guam, Northern Marianas Island, Puerto Rico, the Virgin Islands, and the Trust Territory of the Pacific Islands). Degree data are compiled for a 12-month period, July through June of the following year. For convenience, degrees in a given July through June period will be referred to by the year in which the period ended, e.g., 1980 means the 12-month period ending June 1980.

It is difficult to establish a completely consistent series of degree data over a long period of time because of changes in definitions, instructions, and field classifications, including the introduction of new specialties. The current NCES taxonomy and survey instrument have been in use from 1971 through 1980. A consistent field of study classification was also used for 1968 through 1970, but changes were more frequent in the early fifties. The data for earlier years are presented as consistently as possible with the classifications used for 1971 through 1980. The focus of this publication is on degrees in S/E fields and, where appropriate, the NCES data have been reclassified according to the National Science Foundation (NSF) field categories. The latter differ from the former primarily in that NSF separates engineering technology from engineering, and history from the social sciences.

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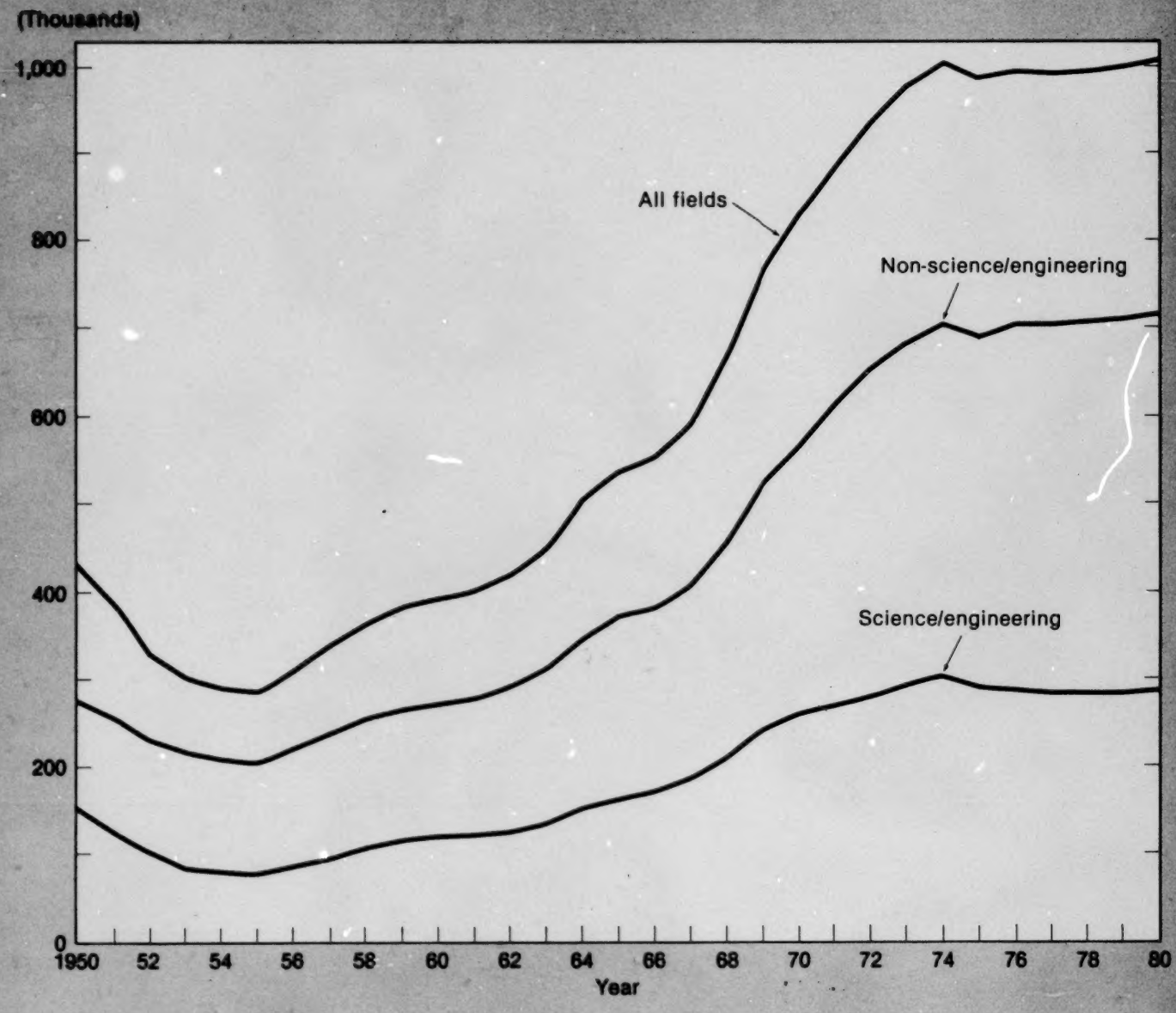
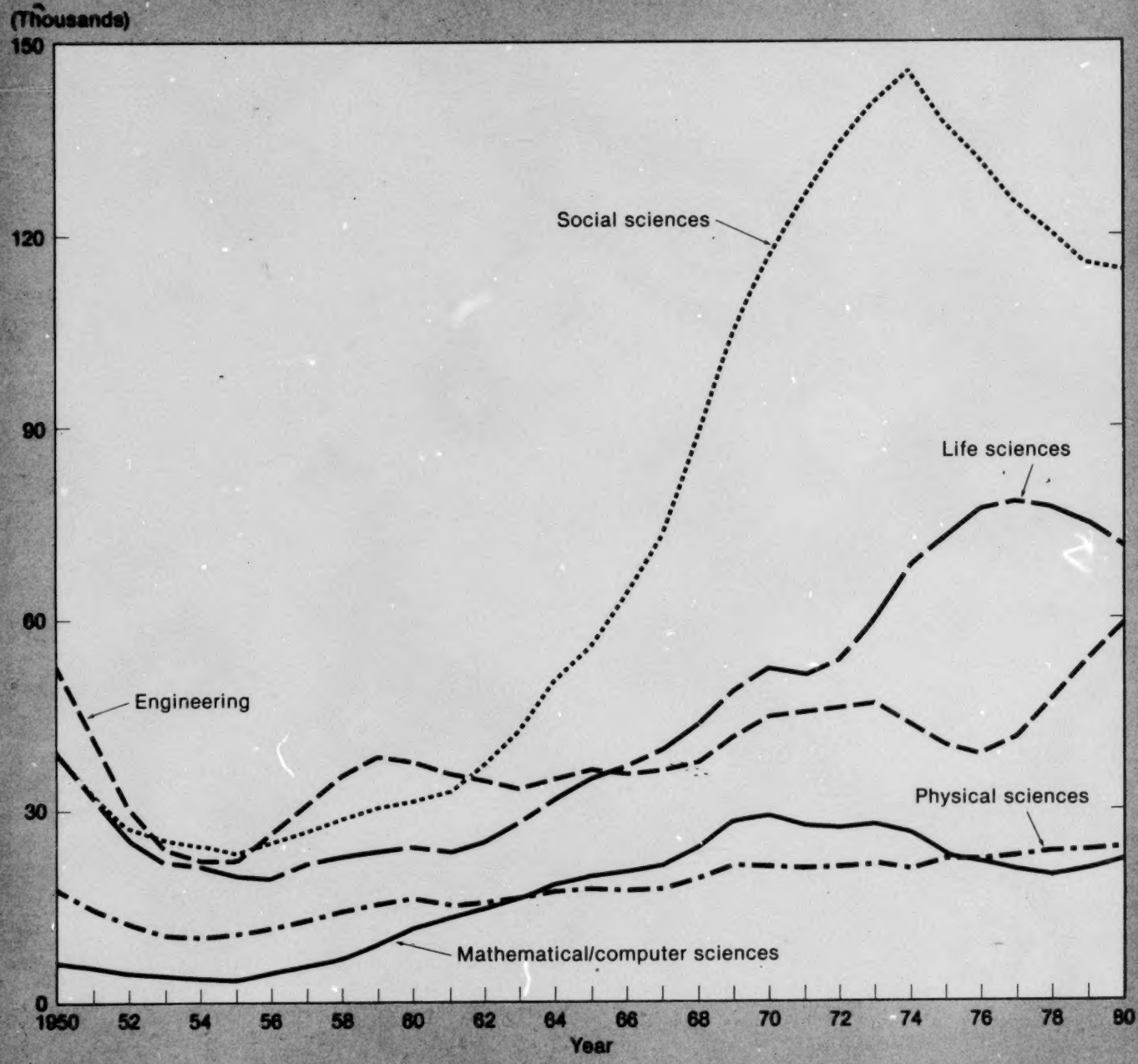
Chart 1. Bachelor's and first-professional degrees



• During 1950-80 there were three distinct phases in the production of bachelor's and first-professional degrees: (1) The decline from 1950 through 1955 as World War II veterans completed their educational goals or exhausted their educational benefits; (2) the sustained growth from 1956 through 1974 attributable to such factors as the rapidly increasing numbers in the college-age population and greater financial aid; and (3) the leveling-off after 1974 despite the continued increases in the size of the college-age population.

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

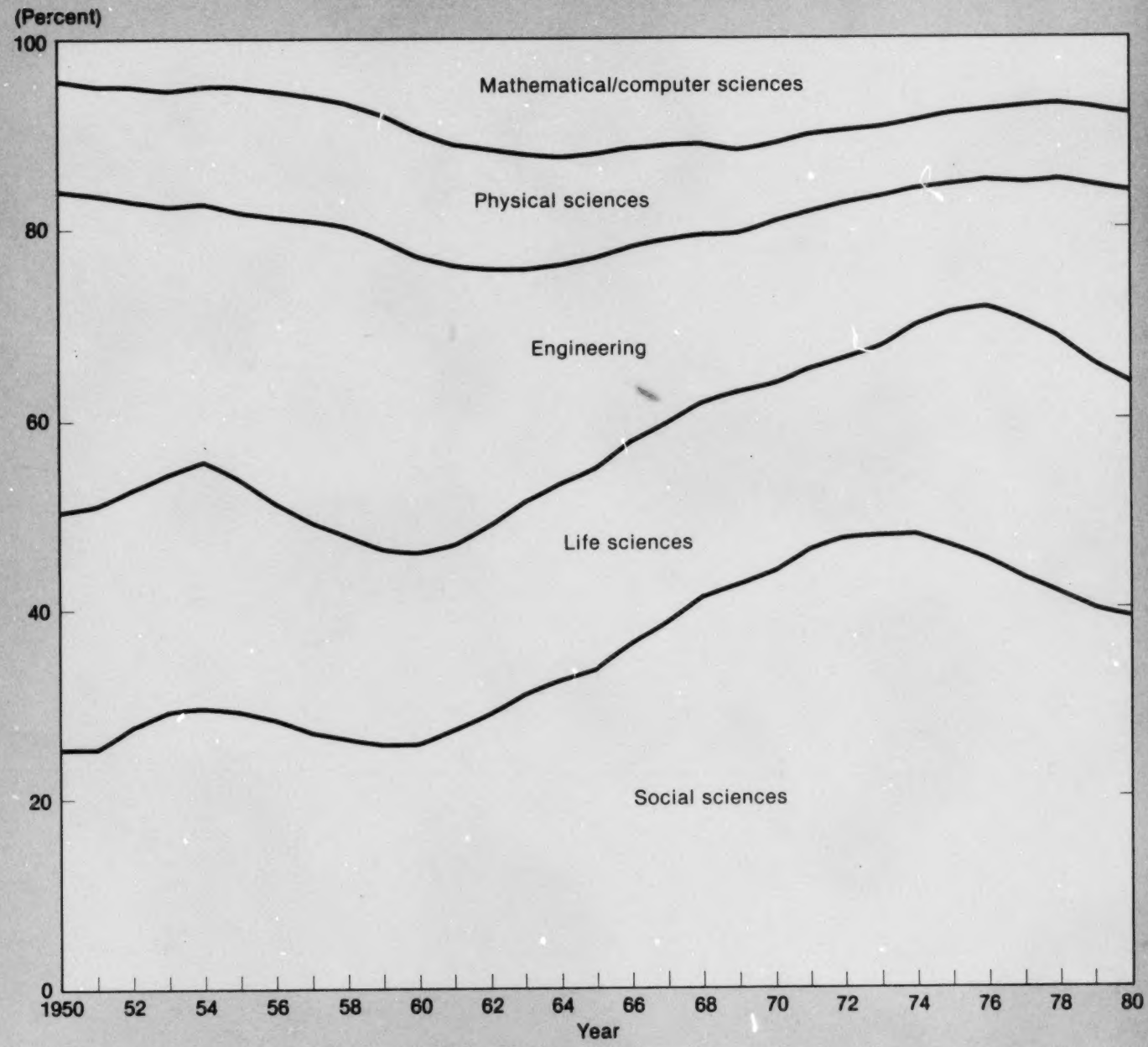
Chart 2. Science/engineering bachelor's and first-professional degrees by major field group



• While the number of engineering bachelor's degrees awarded in 1950 was not exceeded until 1979, the recent period, 1976-80, shows a very rapid increase of 52 percent. During this latter period, degrees also increased in the physical sciences and mathematical/computer sciences, but decreased in the life and social sciences.

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

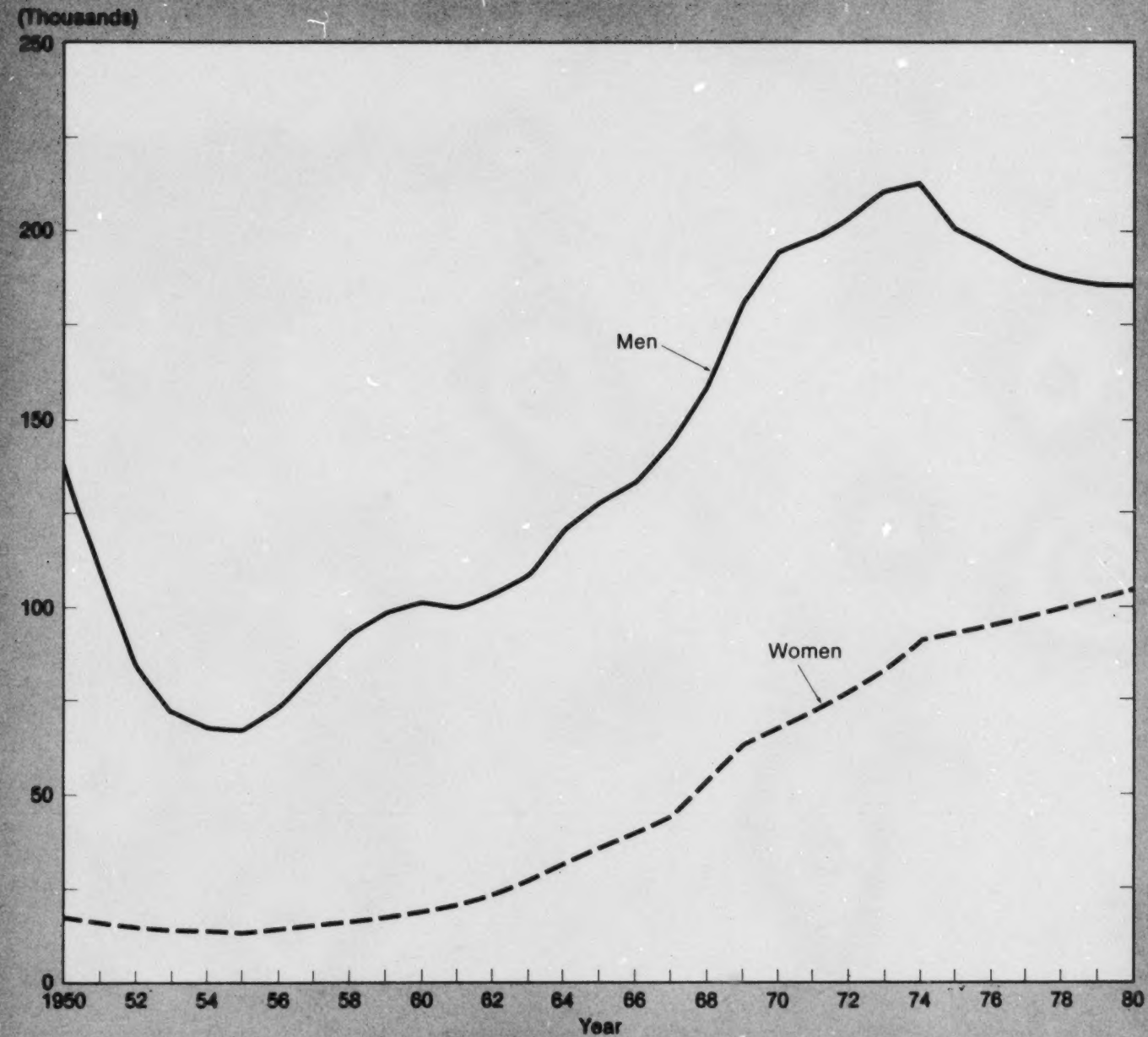
Chart 3. Percent distribution of science/engineering bachelor's and first-professional degrees by major field group



• The relative share of bachelor's degrees in social sciences increased spectacularly during the Vietnam Era but fell sharply after 1974. The proportion of all degrees represented by the physical sciences and engineering declined steadily from 1960 to the midseventies, but there has been a resurgence since that time, particularly in engineering.

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

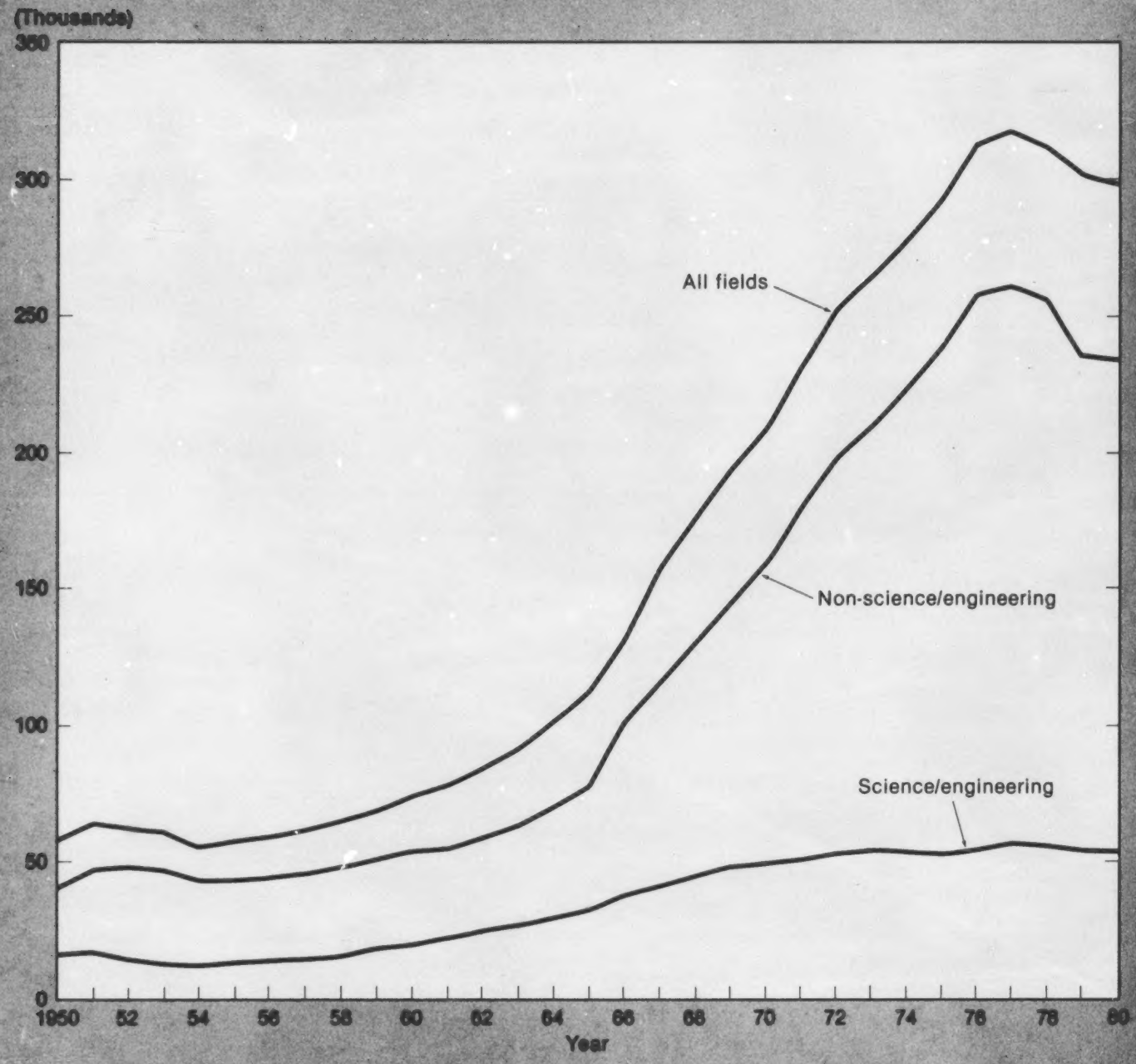
Chart 4. Science/engineering bachelor's and first-professional degrees by sex



• One of the striking developments of the post-World War II era has been the increasing participation of women in higher education. Women received only one-fourth of all bachelor's and first-professional degrees in 1950 and almost one-half in 1980. Their share of S/E degrees increased at an even faster rate—from 12 percent in 1950 to 36 percent in 1980.

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

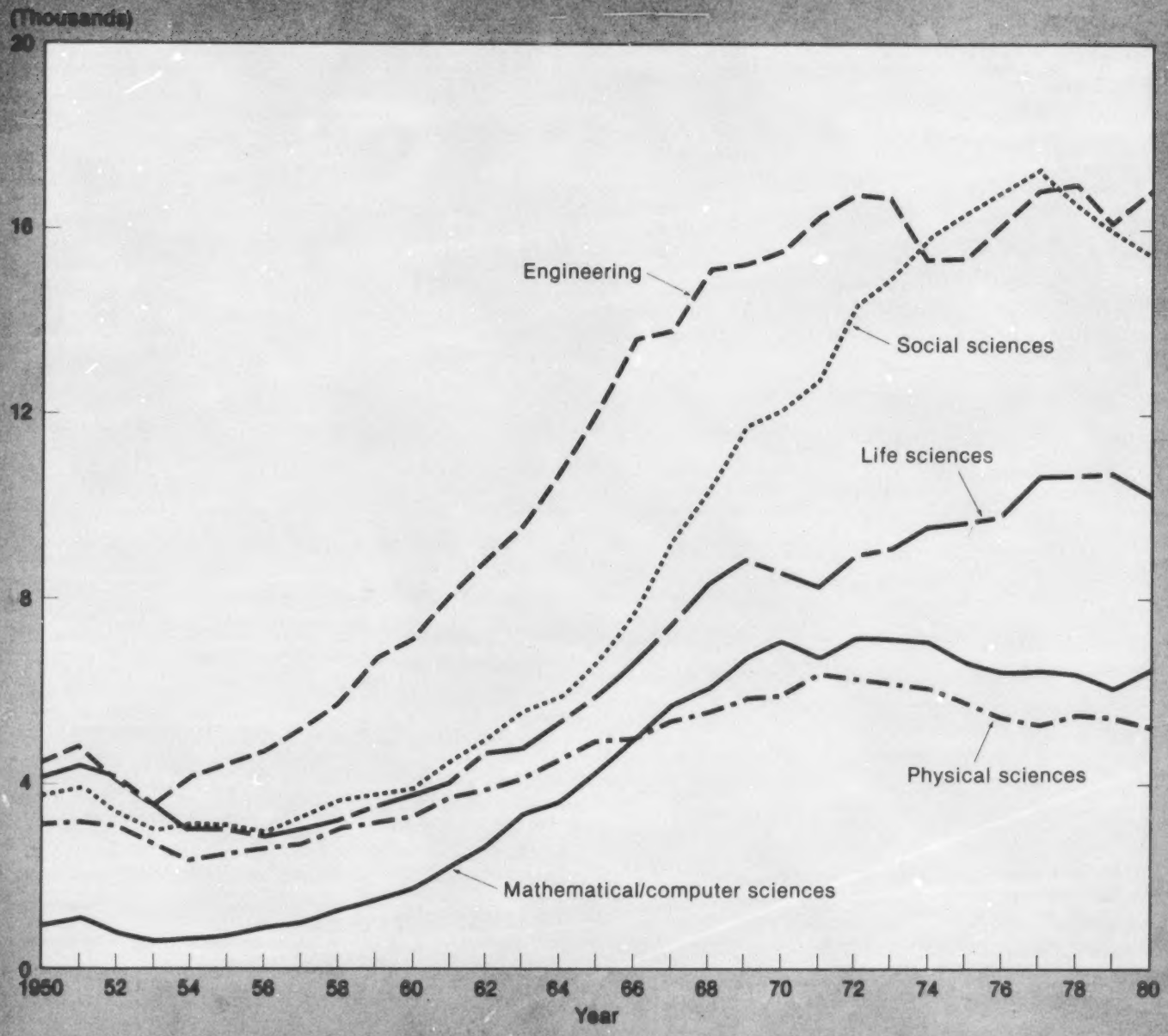
Chart 5. Master's degrees



• The majority of master's degrees are awarded in non-S/E fields, particularly in education and business and management, and they have grown much faster than S/E degrees. The latter accounted for a high of 30 percent of all master's degrees in 1965 but have declined since to about 18 percent in the last 6 years.

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

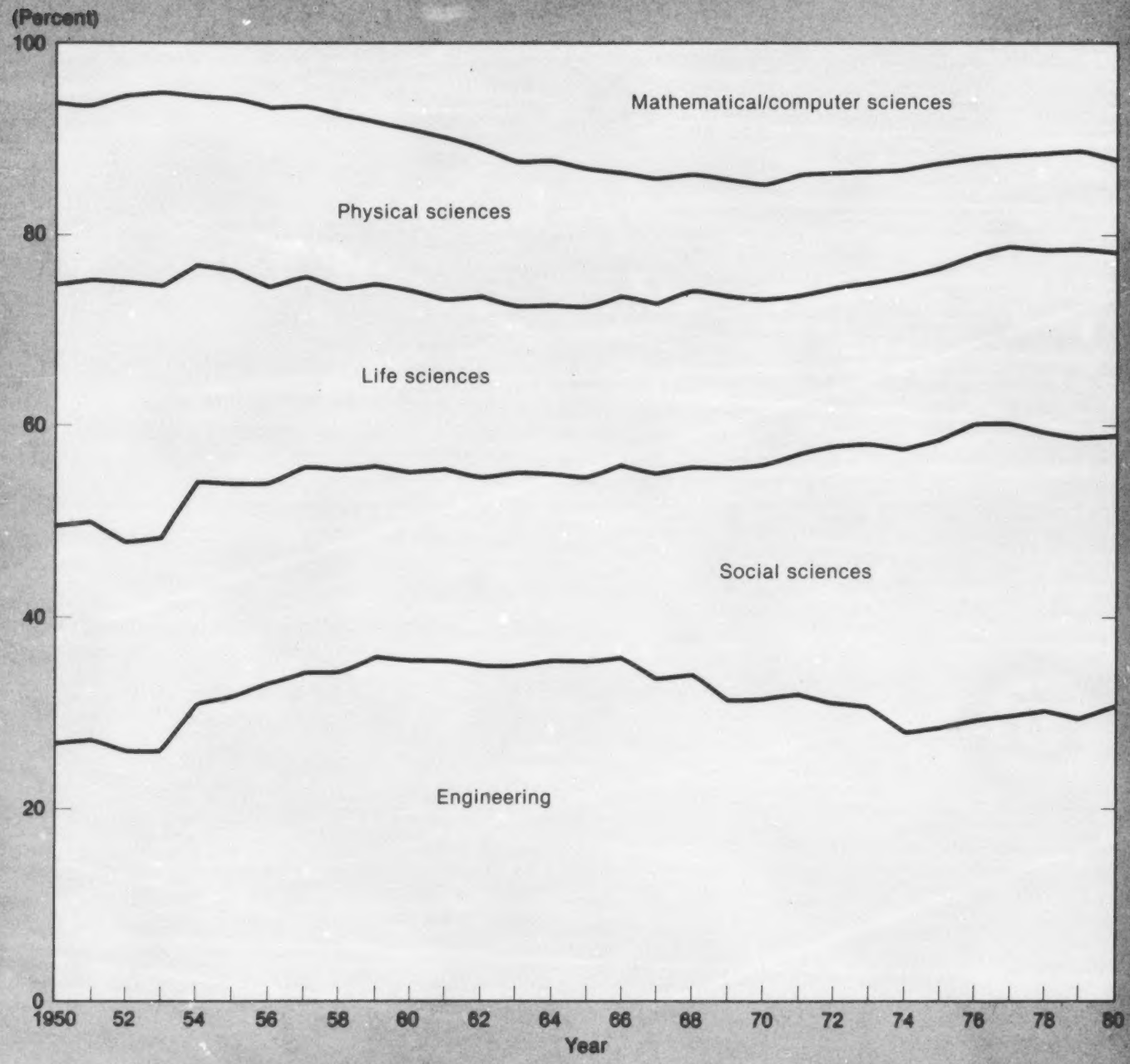
Chart 6. Science/engineering master's degrees by major field group



• Until about 1970, master's degrees in all major fields exhibited similar trends. Since then, however, the trends have diverged with declines setting in for both physical and mathematical/computer sciences while the others have generally continued to increase. Master's-degree trends in the sciences, but not engineering, are similar to those for baccalaureates. The recent surge in engineering baccalaureates has had no counterpart at the master's level.

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

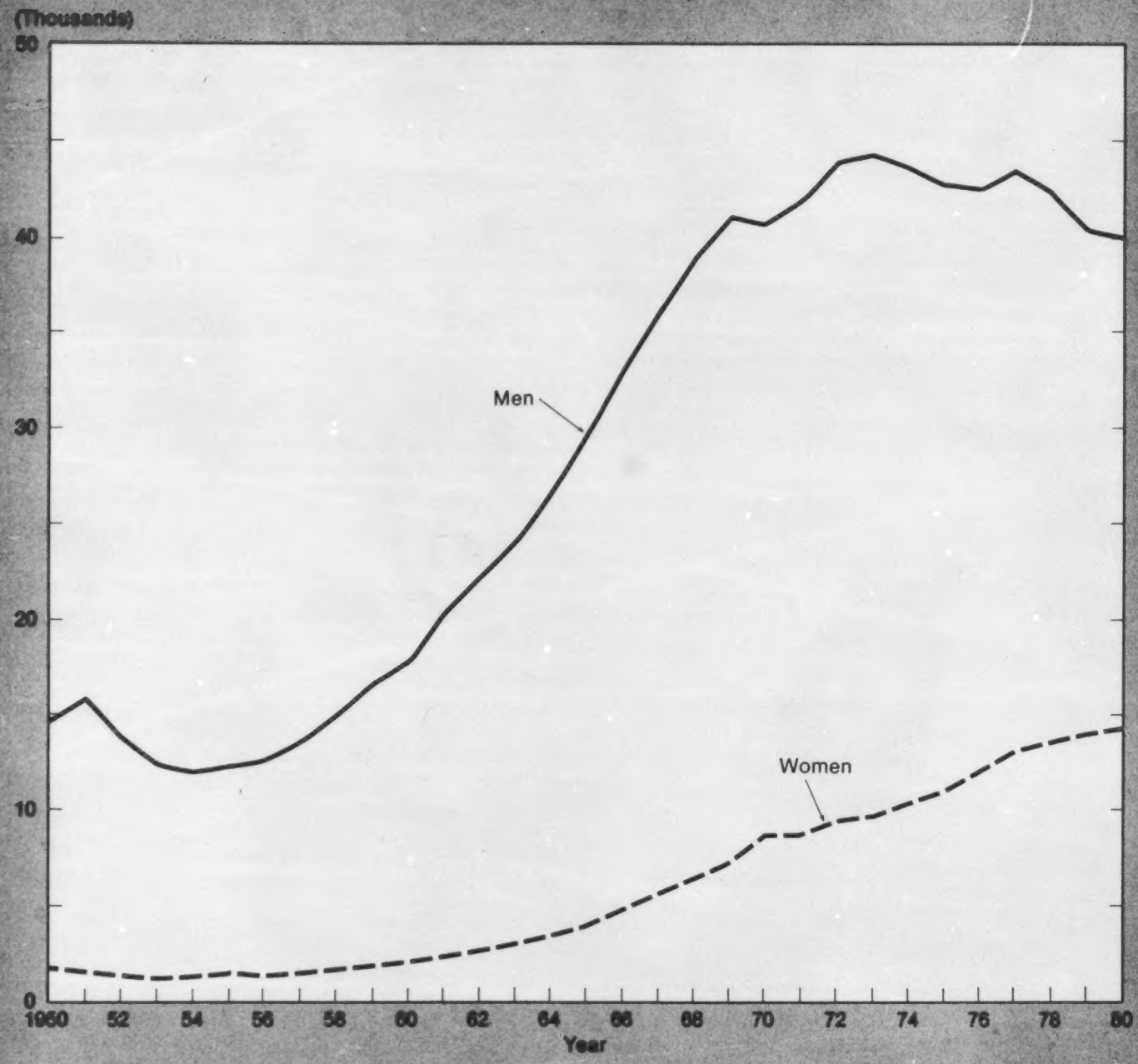
Chart 7. Percent distribution of science/engineering master's degrees by major field group



• Degrees in engineering provide the largest share of S/E master's degrees. Over the 1950-80 period, the proportion of degrees in the social and mathematical/computer sciences have generally increased, but those in the life and physical sciences have declined.

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

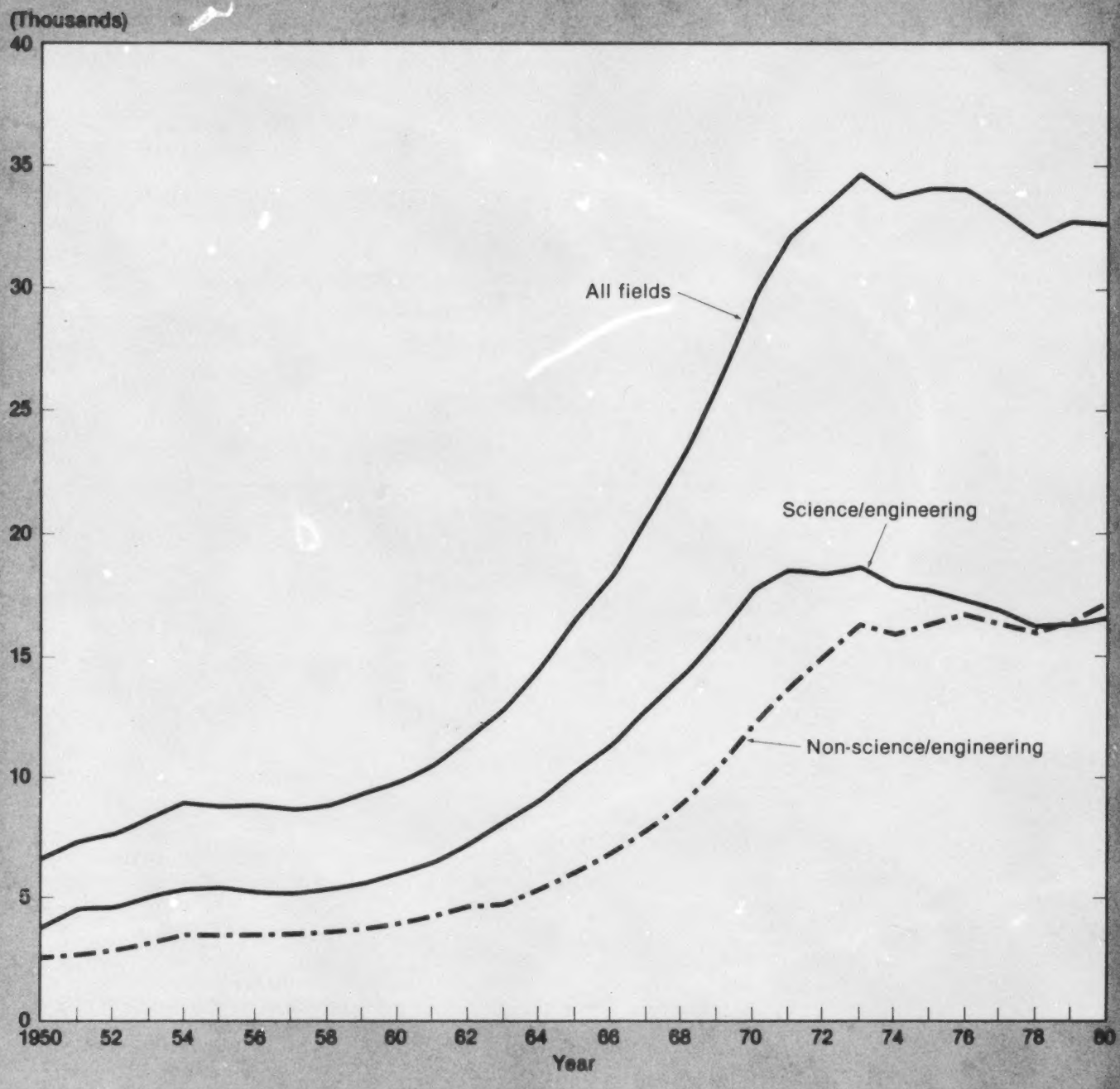
Chart 8. Science/engineering master's degrees by sex



• Women have earned an increasing number of S/E master's degrees each year since 1956. In contrast, the number earned by men reached a peak in 1974 and was 10 percent below that level in 1980. Women received over 26 percent of these degrees in 1980 compared to 17 percent in 1970 and 10 percent in 1960.

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

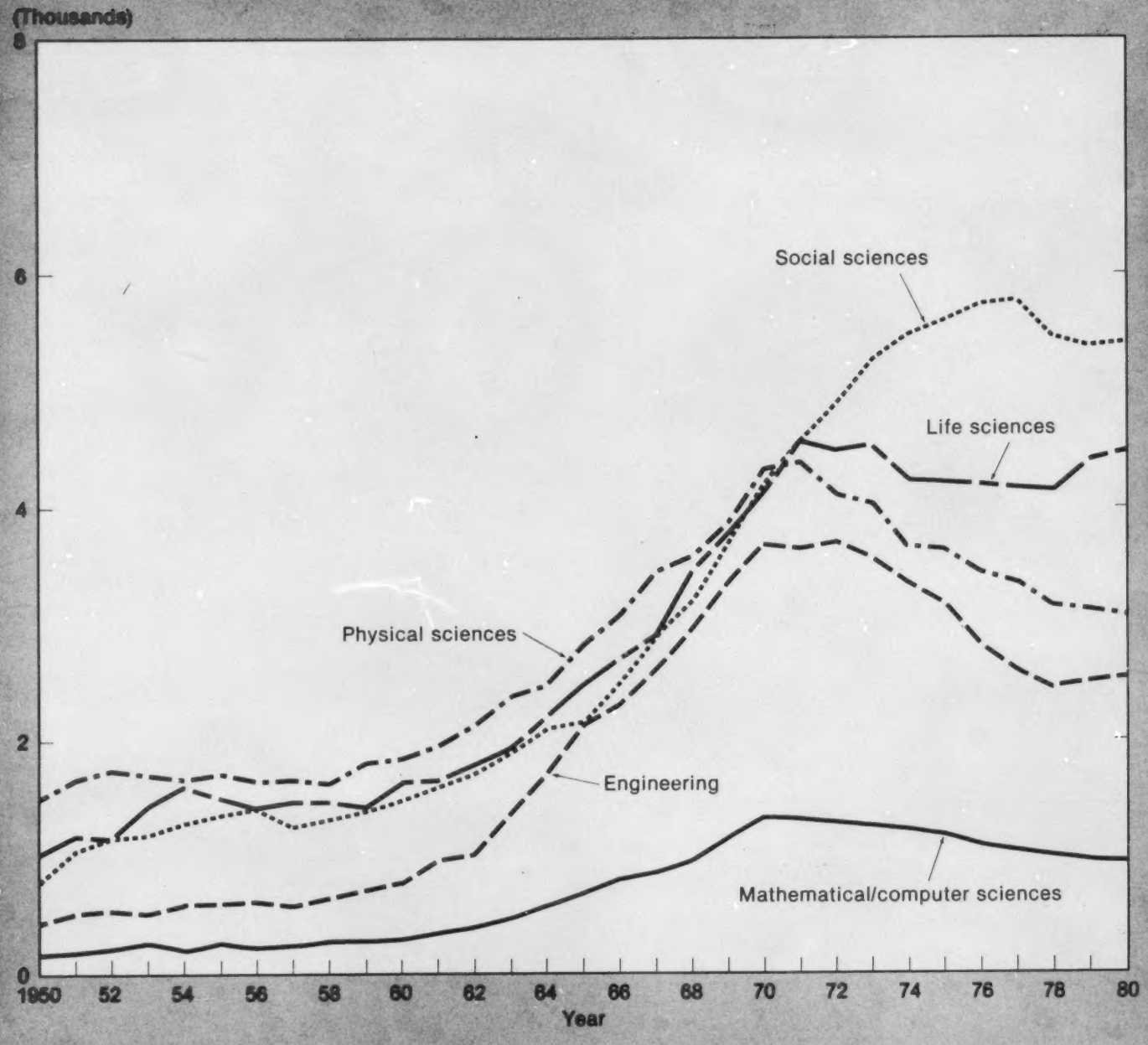
Chart 9. Doctor's degrees



• S/E degrees accounted for over 60 percent of all doctorates until 1969 but declined to only 50 percent for the years 1978-80. S/E doctorates reached a peak of 18,600 in 1973 but were 9 percent below that level in 1980.

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

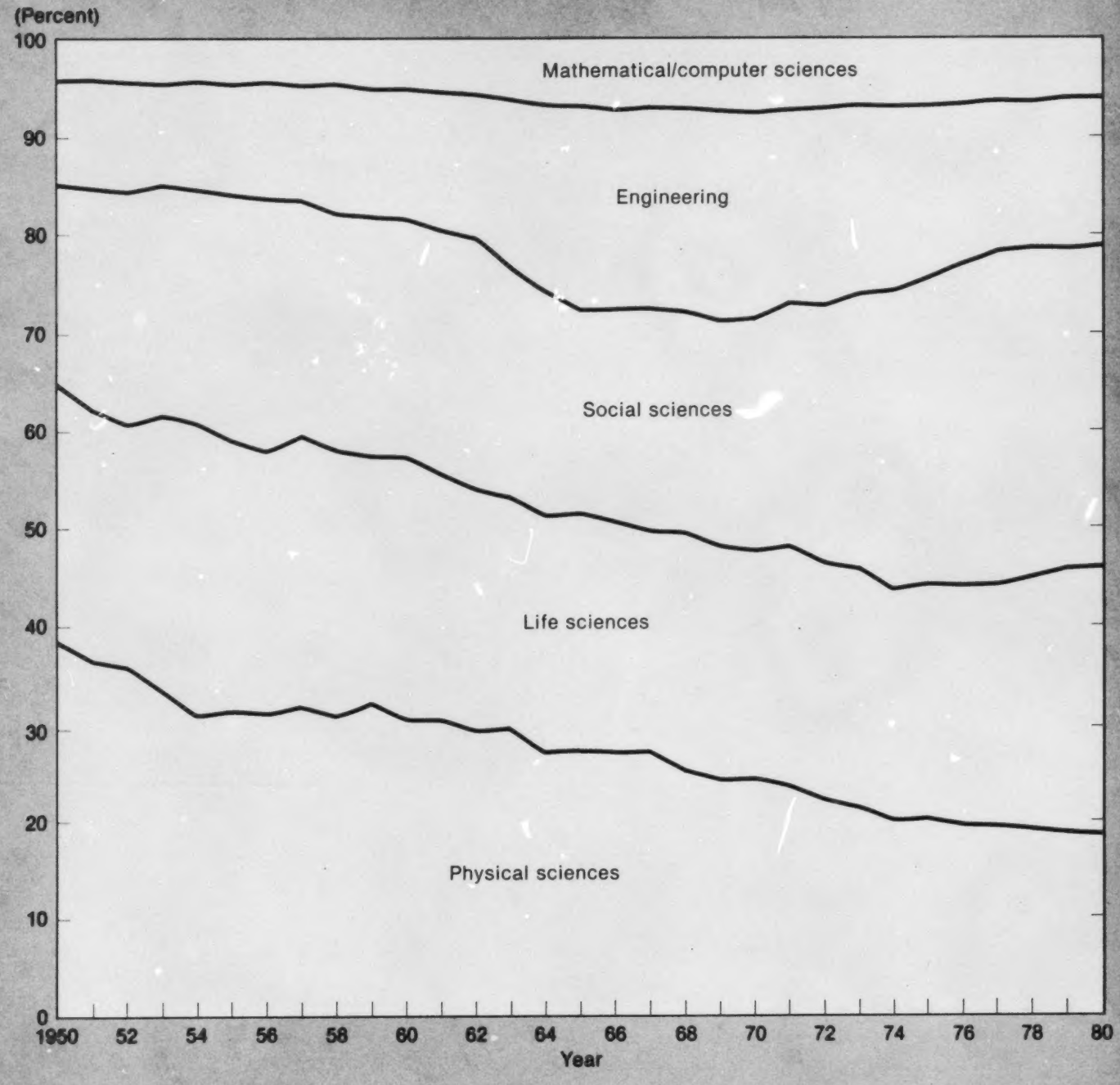
Chart 10. Science/engineering doctor's degrees by major field group



• In 1980, doctor's degrees in life and social sciences were near the peaks established in the early seventies but degrees in the other major field groups were substantially below their previous peaks. Engineering degrees were one-third less than their high in the early seventies, and physical and mathematical/computer sciences were about 29 percent below their peaks.

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

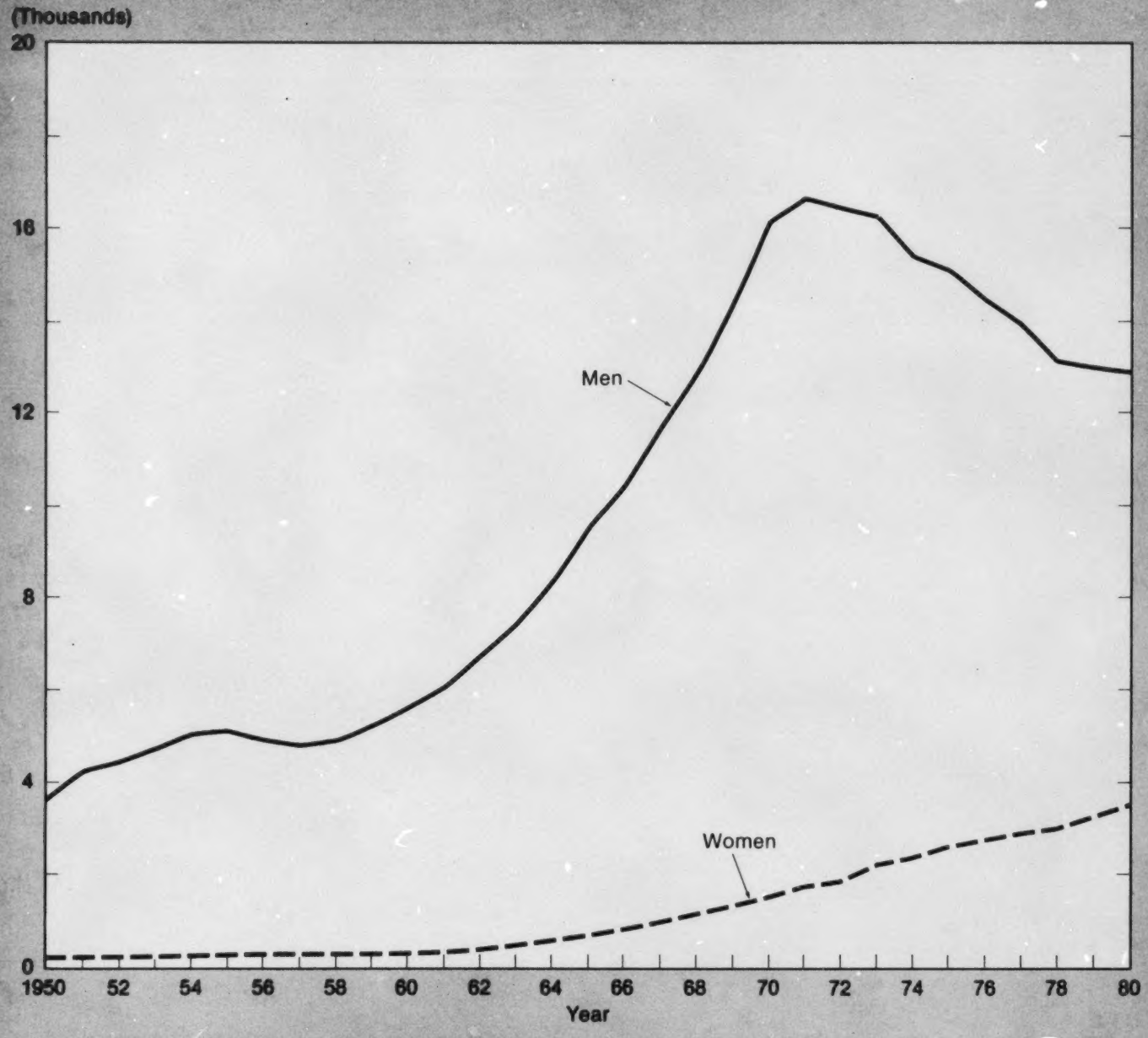
Chart 11. Percent distribution of science/engineering doctor's degrees by major field group



• The proportion of S/E doctorate degrees represented by the physical sciences has dropped steadily over the last three decades. During the last 15 years the share of the social sciences was the only one showing a significant increase.

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

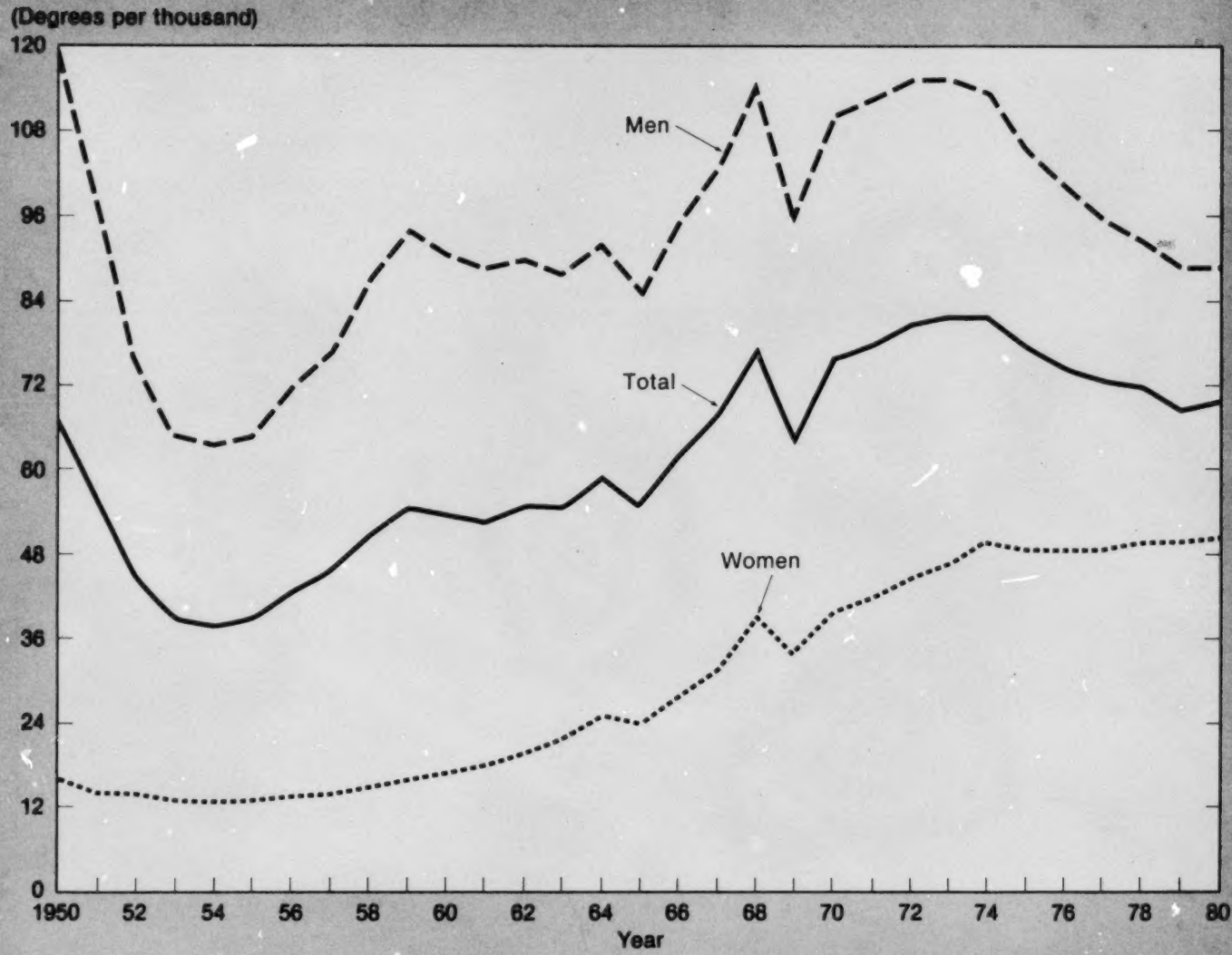
Chart 12. Science/engineering doctor's degrees by sex



• Women receive a smaller share of S/E degrees at the doctorate level than at other degree levels. They have increased rapidly since 1970, however, rising from 9 percent to 21 percent in 1980 partly because of a decrease in degrees awarded to men. Their relative rate of increase in S/E doctorates was higher than for other degree levels during the last decade.

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

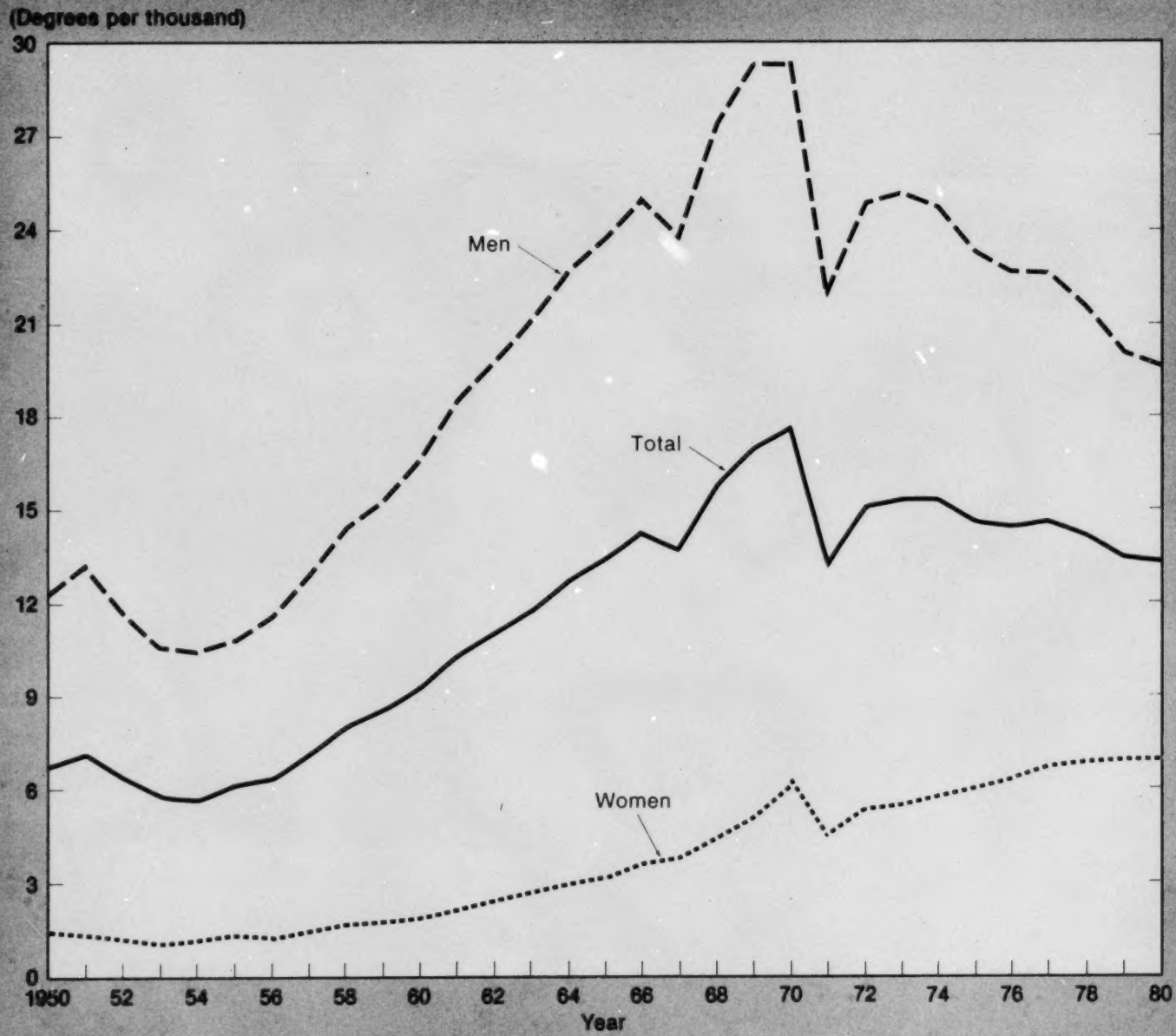
Chart 13. Science/engineering bachelor's and first-professional degrees per thousand 22-year-olds in the U.S. population



• Demography accounts for only part of the increase in the number of degrees awarded between 1950-80. There were 39 S/E bachelor's and first-professional degrees awarded per thousand 22-year-olds in 1955. If the degrees-per-thousand had remained constant at the 1955 rate, the number of S/E bachelor's degrees in 1980 would have been only about 82,000 higher than in 1955. Actual degree production was 211,000 higher. Therefore, about 40 percent of the increase from 1955 to 1980 may be attributable to demographic changes and about 60 percent to changes in other factors, such as the perceived value of education and educational opportunities.

SOURCES: National Science Foundation, National Center for Education Statistics, Department of Education, and Bureau of the Census, Department of Commerce

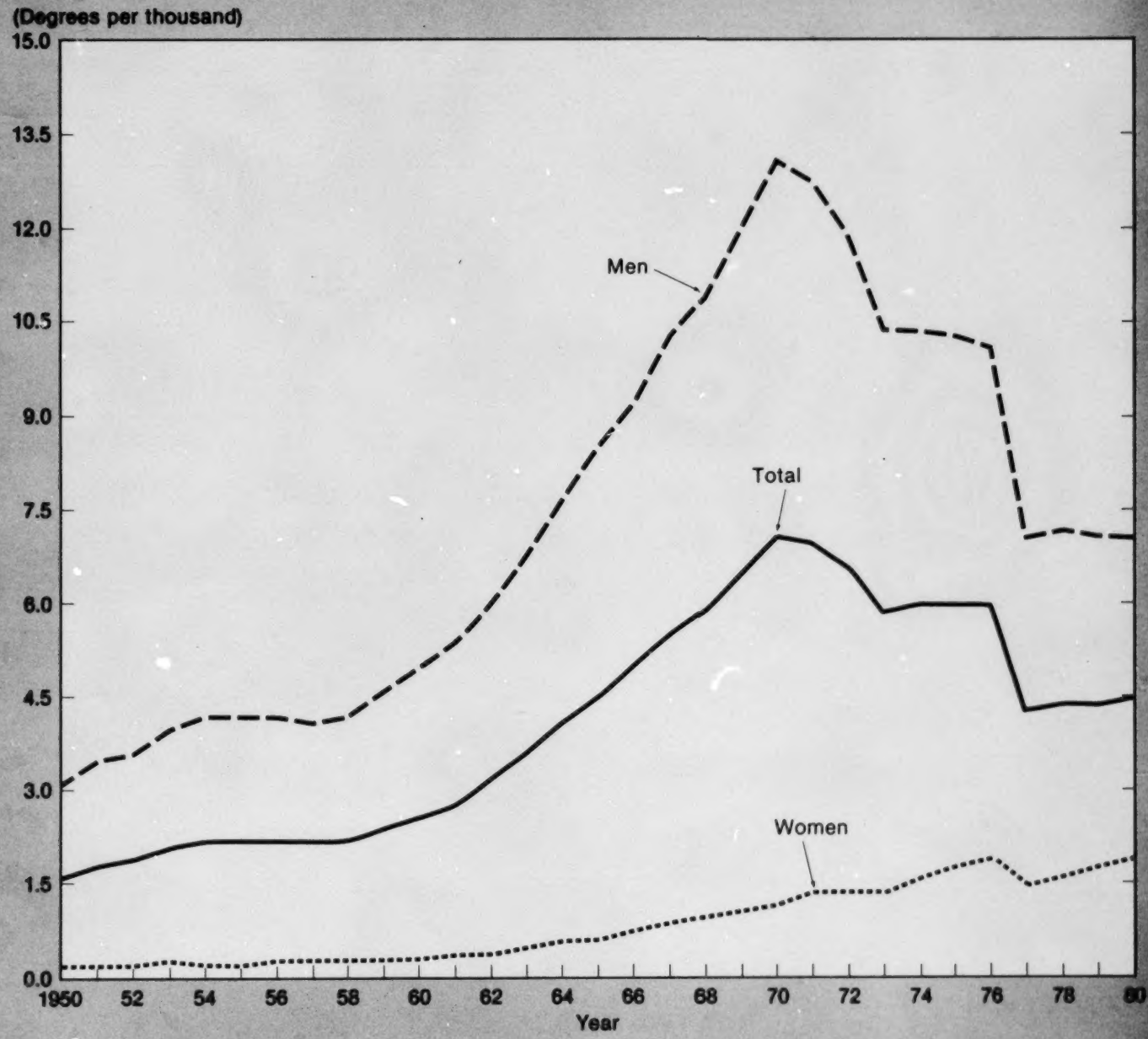
Chart 14. Science/engineering master's degrees per thousand 24-year-olds in the U.S. population



• The number of S/E master's degrees per thousand 24-year-olds increased rapidly from 1954 to 1970, but has declined almost continuously since then. The number of degrees awarded per thousand 24-year-olds has generally been increasing for women but not by enough to offset the recent decline experienced by men.

SOURCES: National Science Foundation, National Center for Education Statistics, Department of Education, and Bureau of the Census, Department of Commerce

Chart 15. Science/engineering doctor's degrees per thousand 30-year-olds in the U.S. population



• The number of S/E doctor's degrees awarded per thousand 30-year-olds increased from about 1.6 in 1950 to a peak of about 7 in 1970/71 and then declined to 4.5 in 1980. The recent decline is due entirely to a sharp fall in the rate for men. The rate for women has been increasing generally over the entire period.

SOURCES: National Science Foundation, National Center for Education Statistics, Department of Education, and Bureau of the Census, Department of Commerce

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Table 1. Degrees in all fields and in science and engineering by level: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Science/ engineering	Percent science/ engineering	Total	Science/ engineering	Percent science/ engineering	Total	Science/ engineering	Percent science/ engineering
1950	433,734	154,933	36	58,219	16,596	29	6,633	3,890	59
1951	384,352	125,927	33	65,132	17,539	27	7,338	4,618	63
1952	331,924	100,411	30	63,471	15,544	24	7,683	4,783	62
1953	304,857	86,142	28	61,023	13,548	22	8,309	5,114	62
1954	292,880	82,376	28	56,823	13,399	24	8,996	5,433	60
1955	287,401	80,901	28	58,204	13,989	24	8,840	5,436	61
1956	311,298	87,720	28	59,294	14,061	24	8,903	5,327	60
1957	340,347	98,509	29	61,955	15,205	25	8,756	5,233	60
1958	365,748	108,727	30	65,614	16,840	26	8,942	5,353	60
1959	385,151	116,802	30	69,584	18,682	27	9,360	5,635	60
1960	394,889	120,937	31	74,497	20,012	27	9,829	6,056	62
1961	401,784	121,660	30	78,269	22,786	29	10,575	6,531	62
1962	420,485	127,469	30	84,889	25,146	30	11,622	7,249	62
1963	450,592	135,964	30	91,418	27,367	30	12,822	8,055	63
1964	502,104	153,361	31	101,222	30,271	30	14,490	9,025	62
1965	538,930	164,936	31	112,195	33,835	30	16,467	10,252	62
1966	555,613	173,471	31	140,772	38,083	27	18,239	11,298	62
1967	594,862	187,849	32	157,892	41,800	26	20,621	12,759	62
1968	671,591	212,174	32	177,150	45,425	26	23,091	14,128	61
1969	769,683	244,519	32	194,414	48,425	25	26,189	15,839	60
1970	833,322	264,122	32	209,387	49,318	24	29,872	17,639	59
1971	884,386	271,176	31	231,486	50,624	22	32,113	18,466	58
1972	937,884	281,228	30	252,774	53,567	21	33,369	18,412	55
1973	980,707	295,391	30	264,525	54,234	21	34,790	18,598	53
1974	1,008,654	305,062	30	278,259	54,175	19	33,826	17,865	53
1975	987,922	294,920	30	293,651	53,852	18	34,086	17,784	52
1976	997,504	292,174	29	313,001	54,747	17	34,076	17,288	51
1977	993,008	288,543	29	318,241	56,731	18	33,244	16,937	51
1978	997,165	288,167	29	312,816	56,237	18	32,156	16,196	50
1979	1,000,562	288,625	29	302,075	54,456	18	32,756	16,363	50
1980	1,010,777	291,983	29	299,095	54,391	18	32,632	16,483	51

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 2. Science/engineering degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Men	Women	Percent women	Men	Women	Percent women	Men	Women	Percent women
1950	136,718	18,215	12	14,740	1,856	11	3,646	244	6
1951	109,822	16,135	13	15,826	1,713	10	4,327	291	6
1952	85,102	15,309	15	14,017	1,527	10	4,489	294	6
1953	72,074	14,068	16	12,258	1,290	10	4,792	322	6
1954	68,106	14,270	17	12,047	1,352	10	5,123	310	6
1955	67,123	13,778	17	12,426	1,563	11	5,134	302	6
1956	73,246	14,474	17	12,623	1,438	10	4,978	349	7
1957	83,218	15,291	16	13,632	1,573	10	4,888	345	7
1958	92,806	15,921	15	15,061	1,779	11	4,975	378	7
1959	99,475	17,327	15	16,706	1,976	11	5,259	376	7
1960	101,575	19,362	16	17,938	2,074	10	5,674	382	6
1961	101,065	20,595	17	20,322	2,464	11	6,082	449	7
1962	103,984	23,485	18	22,334	2,812	11	6,748	501	7
1963	108,865	27,099	20	24,173	3,194	12	7,482	573	7
1964	120,888	32,473	21	26,704	3,567	12	8,393	632	7
1965	128,723	36,213	22	29,753	4,082	12	9,543	709	7
1966	133,989	39,482	23	33,201	4,882	13	10,423	875	8
1967	143,847	44,002	23	36,083	5,717	14	11,746	1,013	8
1968	158,711	53,463	25	38,913	6,512	14	12,924	1,204	9
1969	181,323	63,196	26	41,111	7,314	15	14,464	1,375	9
1970	195,244	68,878	26	40,741	8,577	17	16,112	1,527	9
1971	198,180	72,996	27	41,966	8,658	17	16,666	1,800	10
1972	203,557	77,671	28	44,010	9,557	18	16,502	1,910	10
1973	211,552	83,839	28	44,474	9,760	18	16,310	2,288	12
1974	213,269	91,793	30	43,630	10,545	19	15,453	2,412	14
1975	201,578	93,342	32	42,847	11,005	20	15,147	2,637	15
1976	196,577	95,597	33	42,675	12,072	22	14,502	2,786	16
1977	191,090	97,453	34	43,577	13,154	23	13,979	2,958	17
1978	188,107	100,060	35	42,547	13,690	24	13,157	3,039	19
1979	186,333	102,292	35	40,416	14,040	26	13,053	3,310	20
1980	186,009	105,974	36	40,008	14,383	26	12,940	3,543	21

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 3. Bachelor's and first-professional degrees by major field group: 1950–80

Year	All fields	Science/engineering fields						All other fields
		Total	Physical sciences	Engineering	Mathematical/ computer sciences	Life sciences	Social sciences	
1950	433,734	154,933	17,725	52,246	6,392	39,101	39,469	278,801
1951	384,352	125,957	14,296	41,473	5,753	32,271	32,164	258,395
1952	331,924	100,411	12,145	30,549	4,721	25,231	27,765	231,513
1953	304,857	86,142	10,414	24,189	4,396	21,835	25,308	218,715
1954	292,880	82,376	9,880	22,329	4,090	21,584	24,493	210,504
1955	287,401	80,901	10,516	22,589	4,034	19,927	23,835	206,500
1956	311,298	87,720	11,672	26,312	4,660	19,890	25,186	223,578
1957	340,347	98,509	12,934	31,211	5,546	21,903	26,915	241,838
1958	365,748	108,727	14,352	35,332	6,924	23,069	29,050	257,021
1959	385,151	116,802	15,460	38,134	9,019	23,861	30,328	268,349
1960	394,889	120,937	16,057	37,808	11,437	24,141	31,494	273,952
1961	401,784	121,660	15,500	35,866	13,127	23,900	33,267	280,124
1962	420,485	127,469	15,894	34,735	14,610	25,200	37,030	293,016
1963	450,592	135,964	16,276	33,458	16,121	27,801	42,308	314,628
1964	502,104	153,361	17,527	35,226	18,677	31,611	50,320	348,743
1965	538,930	164,936	17,916	36,795	19,668	34,842	55,715	373,994
1966	555,613	173,471	17,186	35,815	20,182	36,864	63,424	382,142
1967	594,862	187,849	17,794	36,188	21,530	39,408	72,929	407,013
1968	671,591	212,174	19,442	37,614	24,084	43,260	87,774	459,417
1969	769,683	244,519	21,591	41,553	28,263	48,713	104,399	525,164
1970	833,322	264,122	21,551	44,772	29,109	52,129	116,561	569,200
1971	884,386	271,176	21,549	45,387	27,306	51,461	125,473	613,210
1972	937,884	281,228	20,887	46,003	27,250	53,484	133,604	656,656
1973	980,707	295,391	20,809	46,989	27,528	59,486	140,579	685,316
1974	1,008,654	305,062	21,287	43,530	26,570	68,226	145,449	703,592
1975	987,922	294,920	20,896	40,065	23,385	72,710	137,864	693,002
1976	997,504	292,174	21,559	39,114	21,749	77,301	132,451	705,330
1977	993,008	288,543	22,618	41,581	20,729	78,472	125,143	704,465
1978	997,165	288,167	23,175	47,411	19,925	77,138	120,518	708,998
1979	1,000,562	288,625	23,363	53,720	20,670	75,085	115,787	711,937
1980	1,010,777	291,983	23,661	59,240	22,686	71,617	114,779	718,794

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 4. Percentage distribution of bachelor's and first-professional degrees by major field group: 1950–80

Year	All fields	Science/engineering fields						All other fields
		Total	Physical sciences	Engineering	Mathematical/computer sciences	Life sciences	Social sciences	
1950	100.0	35.7	4.1	12.0	1.5	9.0	9.1	64.3
1951	100.0	32.8	3.7	10.8	1.5	8.4	8.4	67.2
1952	100.0	30.3	3.7	9.2	1.4	7.6	8.4	69.7
1953	100.0	28.3	3.4	7.9	1.4	7.2	8.3	71.7
1954	100.0	28.1	3.4	7.6	1.4	7.4	8.4	71.9
1955	100.0	28.1	3.7	7.9	1.4	6.9	8.3	71.9
1956	100.0	28.2	3.7	8.5	1.5	6.4	8.1	71.8
1957	100.0	28.9	3.8	9.2	1.6	6.4	7.9	71.1
1958	100.0	29.7	3.9	9.7	1.9	6.3	7.9	70.3
1959	100.0	30.3	4.0	9.9	2.3	6.2	7.9	69.7
1960	100.0	30.6	4.1	9.6	2.9	6.1	8.0	69.4
1961	100.0	30.3	3.9	8.9	3.3	5.9	8.3	69.7
1962	100.0	30.3	3.8	8.3	3.5	6.0	8.8	69.7
1963	100.0	30.2	3.6	7.4	3.6	6.2	9.4	69.8
1964	100.0	30.5	3.5	7.0	3.7	6.3	10.0	69.5
1965	100.0	30.6	3.3	6.8	3.6	6.5	10.3	69.4
1966	100.0	31.2	3.1	6.4	3.6	6.6	11.4	68.8
1967	100.0	31.6	3.0	6.1	3.6	6.6	12.3	68.4
1968	100.0	31.6	2.9	5.6	3.6	6.4	13.1	68.4
1969	100.0	31.8	2.8	5.4	3.7	6.3	13.6	68.2
1970	100.0	31.7	2.6	5.4	3.5	6.3	14.0	68.3
1971	100.0	30.7	2.4	5.1	3.1	5.8	14.2	69.3
1972	100.0	30.0	2.2	4.9	2.9	5.7	14.2	70.0
1973	100.0	30.1	2.1	4.8	2.8	6.1	14.3	69.9
1974	100.0	30.2	2.1	4.3	2.6	6.8	14.4	69.8
1975	100.0	29.9	2.1	4.1	2.4	7.4	14.0	70.1
1976	100.0	29.3	2.2	3.9	2.2	7.7	13.3	70.7
1977	100.0	29.1	2.3	4.2	2.1	7.9	12.6	70.9
1978	100.0	28.9	2.3	4.8	2.0	7.7	12.1	71.1
1979	100.0	28.8	2.3	5.4	2.1	7.5	11.6	71.2
1980	100.0	28.9	2.3	5.9	2.2	7.1	11.4	71.1

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 5. Bachelor's and first-professional degrees earned by men, by major field group: 1950–80

Year	All fields	Science engineering fields						All other fields
		Total	Physical sciences	Engineering	Mathematical/computer sciences	Life sciences	Social sciences	
1950	329,819	136,718	15,988	52,071	4,946	34,173	29,540	193,101
1951	279,343	109,822	12,876	41,386	4,311	28,018	23,231	169,521
1952	227,029	85,102	10,813	30,489	3,389	21,426	18,985	141,927
1953	200,820	72,074	9,137	24,152	3,122	18,360	17,303	128,746
1954	187,500	68,106	8,607	22,264	2,722	18,079	16,434	119,394
1955	183,602	67,123	9,134	22,527	2,724	16,677	16,061	116,479
1956	199,571	73,246	10,171	26,236	3,137	16,508	17,194	126,325
1957	222,738	83,218	11,321	31,130	3,826	18,327	18,614	139,520
1958	242,948	92,806	12,683	35,223	4,953	19,399	20,548	150,142
1959	254,868	99,475	13,694	38,013	6,504	19,734	21,530	155,393
1960	255,504	101,575	14,041	37,663	8,312	19,650	21,909	153,929
1961	255,900	101,065	13,492	35,732	9,483	19,078	23,280	154,835
1962	262,015	103,984	13,748	34,610	10,355	19,730	25,541	158,031
1963	274,750	108,865	14,038	33,328	11,163	21,627	28,709	165,885
1964	299,813	120,888	15,077	35,067	12,682	24,398	33,664	178,925
1965	319,670	128,723	15,384	36,656	13,215	26,565	36,903	190,947
1966	331,122	133,989	14,853	35,669	13,480	28,400	41,587	197,133
1967	355,300	143,847	15,392	36,004	14,196	30,460	47,795	211,453
1968	392,830	158,711	16,768	37,403	15,243	33,169	56,128	234,119
1969	446,933	181,323	18,639	41,240	17,915	37,405	66,124	265,610
1970	486,949	195,244	18,582	44,434	18,593	40,254	73,381	291,705
1971	514,220	198,180	18,535	45,022	17,488	39,658	77,477	316,040
1972	544,652	203,557	17,739	45,502	17,466	40,790	82,060	341,095
1973	568,361	211,552	17,688	46,409	17,543	44,916	84,996	356,809
1974	579,811	213,269	17,751	42,824	16,851	50,390	85,453	366,542
1975	557,654	201,578	17,058	39,205	14,729	51,899	78,687	356,076
1976	561,759	196,577	17,420	37,671	14,071	53,512	73,903	365,182
1977	551,789	191,090	18,067	39,495	13,241	52,863	67,424	360,699
1978	543,619	188,107	18,188	43,914	12,815	50,184	63,006	355,512
1979	534,303	186,333	18,076	48,801	13,249	47,537	58,670	347,970
1980	530,738	186,009	18,010	53,226	14,439	44,021	56,313	344,729

SOURCES: National Science Foundation and National Center for Educational Statistics, Department of Education

Table 6. Bachelor's and first-professional degrees earned by women, by major field group: 1950–80

Year	All fields	Science/engineering fields						All other fields
		Total	Physical sciences	Engineering	Mathematical/ computer sciences	Life sciences	Social sciences	
1950	103,915	18,215	1,737	175	1,446	4,928	9,929	85,700
1951	105,009	16,135	1,420	87	1,442	4,253	8,933	88,874
1952	104,895	15,309	1,332	60	1,332	3,805	8,780	89,586
1953	104,037	14,068	1,277	37	1,274	3,475	8,005	89,969
1954	105,380	14,270	1,273	65	1,368	3,505	8,059	91,110
1955	103,799	13,778	1,382	62	1,310	3,250	7,774	90,021
1956	111,727	14,474	1,501	76	1,523	3,382	7,992	97,253
1957	117,609	15,291	1,613	81	1,720	3,576	8,301	102,318
1958	122,800	15,921	1,669	109	1,971	3,670	8,502	106,879
1959	130,283	17,327	1,766	121	2,515	4,127	8,798	112,956
1960	139,385	19,362	2,016	145	3,125	4,491	9,585	120,023
1961	145,884	20,595	2,008	134	3,644	4,822	9,987	125,289
1962	158,470	23,485	2,146	125	4,255	5,470	11,489	134,985
1963	175,842	27,099	2,238	130	4,958	6,174	13,599	148,743
1964	202,291	32,473	2,450	159	5,995	7,213	16,656	169,818
1965	219,260	36,213	2,532	139	6,453	8,277	18,812	183,047
1966	224,491	39,482	2,333	146	6,702	8,464	21,837	185,009
1967	239,562	44,002	2,402	184	7,334	8,948	25,134	195,560
1968	278,761	53,463	2,674	211	8,841	10,091	31,646	225,298
1969	322,750	63,196	2,952	313	10,348	11,308	38,275	259,554
1970	346,373	68,878	2,969	338	10,516	11,875	43,180	277,495
1971	370,166	72,996	3,014	365	9,818	11,803	47,996	297,170
1972	393,232	77,671	3,148	501	9,784	12,694	51,544	315,561
1973	412,346	83,839	3,121	580	9,985	14,570	55,583	328,507
1974	428,843	91,793	3,536	706	9,719	17,836	59,996	337,050
1975	430,268	93,342	3,838	860	8,656	20,811	59,177	336,926
1976	435,745	95,597	4,139	1,443	7,678	23,789	58,548	340,148
1977	441,219	97,453	4,551	2,086	7,488	25,609	57,719	343,766
1978	453,546	100,060	4,987	3,497	7,110	26,954	57,512	353,486
1979	466,259	102,292	5,287	4,919	7,421	27,548	57,117	363,967
1980	480,039	105,974	5,651	6,014	8,247	27,596	58,466	374,065

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 7. Master's degrees by major field group: 1950–80

Year	All fields	Science/engineering fields						All other fields
		Total	Physical sciences	Engineering	Mathematical/ computer sciences	Life sciences	Social sciences	
1950	58,219	16,596	3,184	4,496	974	4,158	3,784	41,623
1951	65,132	17,539	3,200	4,825	1,109	4,417	3,988	47,593
1952	63,471	15,544	3,054	4,091	802	4,184	3,413	47,927
1953	61,023	13,548	2,711	3,566	677	3,568	3,026	47,475
1954	56,823	13,399	2,374	4,204	706	3,007	3,108	43,424
1955	58,204	13,989	2,544	4,484	761	3,090	3,110	44,215
1956	59,294	14,061	2,655	4,724	898	2,867	2,917	45,233
1957	61,955	15,205	2,704	5,233	965	3,019	3,284	46,750
1958	65,614	16,840	3,034	5,788	1,234	3,179	3,605	48,774
1959	69,584	18,682	3,179	6,753	1,499	3,537	3,714	50,902
1960	74,497	20,012	3,387	7,159	1,765	3,751	3,950	54,485
1961	78,269	22,786	3,799	8,178	2,238	4,085	4,486	55,483
1962	84,889	25,146	3,929	8,909	2,680	4,672	4,956	59,743
1963	91,418	27,367	4,132	9,635	3,323	4,718	5,559	64,051
1964	101,122	30,271	4,567	10,827	3,603	5,357	5,917	70,851
1965	112,195	33,835	4,918	12,056	4,294	5,978	6,589	78,360
1966	140,772	38,083	4,992	13,678	5,010	6,666	7,737	102,689
1967	157,892	41,800	5,412	13,885	5,733	7,465	9,305	116,092
1968	177,150	45,425	5,508	15,188	6,081	8,315	10,333	131,725
1969	194,414	48,425	5,911	15,243	6,735	8,809	11,727	145,989
1970	209,387	49,318	5,948	15,597	7,107	8,590	12,076	160,069
1971	231,486	50,624	6,386	16,347	6,789	8,320	12,782	180,862
1972	252,774	53,567	6,307	16,802	7,186	8,914	14,358	199,207
1973	264,525	54,234	6,274	16,758	7,146	9,080	14,976	210,291
1974	278,259	54,175	6,087	15,393	7,116	9,605	15,974	224,084
1975	293,651	53,852	5,830	15,434	6,637	9,618	16,333	239,799
1976	313,001	54,747	5,485	16,170	6,466	9,823	16,803	258,254
1977	318,241	56,731	5,345	16,889	6,496	10,707	17,294	261,510
1978	312,816	56,237	5,576	17,015	6,421	10,711	16,514	256,579
1979	302,075	54,456	5,464	16,193	6,101	10,719	15,979	247,619
1980	299,095	54,391	5,233	16,846	6,515	10,278	15,519	244,704

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 8. Percentage distribution of master's degrees by major field group: 1950–80

Year	All fields	Science/engineering fields						All other fields
		Total	Physical sciences	Engineering	Mathematical/ computer sciences	Life sciences	Social sciences	
1950	100.0	28.5	5.5	7.7	1.7	7.1	6.5	71.5
1951	100.0	26.9	4.9	7.4	1.7	6.8	6.1	73.1
1952	100.0	24.5	4.8	6.4	1.3	6.6	5.4	75.5
1953	100.0	22.2	4.4	5.8	1.1	5.8	5.0	77.8
1954	100.0	23.6	4.2	7.4	1.2	5.3	5.5	76.4
1955	100.0	24.0	4.4	7.7	1.3	5.3	5.3	76.0
1956	100.0	23.7	4.5	8.0	1.5	4.6	4.9	76.3
1957	100.0	24.5	4.4	8.4	1.6	4.9	5.3	75.5
1958	100.0	25.7	4.6	8.8	1.9	4.8	5.5	74.3
1959	100.0	26.8	4.6	9.7	2.2	5.1	5.3	73.2
1960	100.0	26.9	4.5	9.6	2.4	5.0	5.3	73.1
1961	100.0	29.1	4.9	10.4	2.9	5.2	5.7	70.9
1962	100.0	29.6	4.6	10.5	3.2	5.5	5.8	70.4
1963	100.0	29.9	4.5	10.5	3.6	5.2	6.1	70.1
1964	100.0	29.9	4.5	10.7	3.6	5.3	5.9	70.1
1965	100.0	30.2	4.4	10.7	3.8	5.3	5.9	69.8
1966	100.0	27.1	3.5	9.7	3.6	4.7	5.5	72.9
1967	100.0	26.5	3.4	8.8	3.6	4.7	5.9	73.5
1968	100.0	25.6	3.1	8.6	3.4	4.7	5.8	74.4
1969	100.0	24.9	3.0	7.8	3.5	4.5	6.0	75.1
1970	100.0	23.6	2.8	7.4	3.4	4.1	5.8	76.4
1971	100.0	21.9	2.8	7.1	2.9	3.6	5.5	78.1
1972	100.0	21.2	2.5	6.6	2.8	3.5	5.7	78.8
1973	100.0	20.5	2.4	6.3	2.7	3.4	5.7	79.5
1974	100.0	19.5	2.2	5.5	2.6	3.5	5.7	80.5
1975	100.0	18.3	2.0	5.3	2.3	3.3	5.6	81.7
1976	100.0	17.5	1.8	5.2	2.1	3.1	5.4	82.5
1977	100.0	17.8	1.7	5.3	2.0	3.4	5.4	82.2
1978	100.0	18.0	1.8	5.4	2.1	3.4	5.3	82.0
1979	100.0	18.0	1.8	5.4	2.0	3.5	5.3	82.0
1980	100.0	18.2	1.7	5.6	2.2	3.4	5.2	81.8

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 9. Master's degrees earned by men, by major field group: 1950–80

Year	All fields	Science/engineering fields						All other fields
		Total	Physical sciences	Engineering	Mathematical/computer sciences	Life sciences	Social sciences	
1950	41,237	14,740	2,919	4,481	784	3,624	2,932	26,497
1951	46,231	15,826	2,974	4,815	929	3,890	3,218	30,405
1952	43,537	14,017	2,830	4,073	663	3,717	2,734	29,520
1953	40,989	12,258	2,547	3,553	565	3,158	2,435	28,731
1954	38,147	12,047	2,197	4,189	579	2,649	2,433	26,100
1955	38,740	12,426	2,337	4,471	613	2,657	2,348	26,314
1956	39,397	12,623	2,435	4,705	719	2,461	2,303	26,774
1957	41,332	13,632	2,483	5,217	777	2,616	2,539	27,700
1958	44,252	15,061	2,763	5,768	994	2,721	2,815	29,191
1959	47,408	16,706	2,909	6,729	1,188	2,976	2,904	30,702
1960	50,937	17,938	3,060	7,133	1,428	3,178	3,139	32,999
1961	54,158	20,322	3,454	8,150	1,772	3,415	3,531	33,836
1962	58,705	22,334	3,544	8,869	2,179	3,887	3,855	36,371
1963	62,944	24,173	3,704	9,603	2,665	3,824	4,377	38,771
1964	69,012	26,704	4,157	10,793	2,914	4,273	4,567	42,308
1965	76,211	29,753	4,405	12,012	3,482	4,816	5,038	46,458
1966	93,184	33,201	4,464	13,602	3,992	5,286	5,857	59,983
1967	103,179	36,083	4,859	13,807	4,423	5,948	7,046	67,096
1968	113,749	38,913	4,873	15,089	4,720	6,451	7,780	74,836
1969	121,881	41,111	5,243	15,130	5,169	6,793	8,776	80,770
1970	126,146	40,741	5,101	15,425	5,298	6,374	8,543	85,405
1971	138,590	41,966	5,533	16,160	5,101	6,130	9,042	96,624
1972	150,085	44,010	5,419	16,521	5,409	6,587	10,074	106,075
1973	155,000	44,474	5,427	16,470	5,416	6,843	10,318	110,526
1974	158,344	43,630	5,200	15,031	5,323	7,195	10,881	114,714
1975	162,115	42,847	4,982	15,038	4,871	7,207	10,749	119,268
1976	167,745	42,675	4,660	15,581	4,776	7,204	10,454	125,070
1977	168,210	43,577	4,458	16,156	4,730	7,696	10,537	124,633
1978	161,708	42,547	4,630	16,144	4,704	7,485	9,584	119,161
1979	153,772	40,416	4,472	15,203	4,469	7,259	9,013	113,356
1980	151,159	40,008	4,258	15,656	4,715	6,952	8,427	111,151

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 10. Master's degrees earned by women, by major field group: 1950–80

Year	All fields	Science/engineering fields						All other fields
		Total	Physical sciences	Engineering	Mathematical/ computer sciences	Life sciences	Social sciences	
1950	16,982	1,856	265	15	190	534	852	15,126
1951	18,901	1,713	226	10	180	527	770	17,188
1952	19,934	1,527	224	18	139	467	679	18,407
1953	20,034	1,290	164	13	112	410	591	18,744
1954	18,676	1,352	177	15	127	358	675	17,324
1955	19,464	1,563	207	13	148	433	762	17,901
1956	19,897	1,438	220	19	179	406	614	18,459
1957	20,623	1,573	221	16	188	403	745	19,050
1958	21,362	1,779	271	20	240	458	790	19,583
1959	22,176	1,976	270	24	311	561	810	20,200
1960	23,560	2,074	327	26	337	573	811	21,486
1961	24,111	2,464	345	28	466	670	955	21,647
1962	26,184	2,812	385	40	501	785	1,101	23,372
1963	28,474	3,194	428	32	658	894	1,182	25,280
1964	32,110	3,567	410	34	689	1,084	1,350	28,543
1965	35,984	4,082	513	44	812	1,162	1,551	31,902
1966	47,588	4,882	528	76	1,018	1,380	1,880	42,706
1967	54,713	5,717	553	78	1,310	1,517	2,259	48,996
1968	63,401	6,512	635	99	1,361	1,864	2,553	56,889
1969	72,533	7,314	668	113	1,566	2,016	2,951	65,219
1970	83,241	8,577	847	172	1,809	2,216	3,533	74,664
1971	92,896	8,658	853	187	1,688	2,190	3,740	84,238
1972	102,689	9,557	888	281	1,777	2,327	4,284	93,132
1973	109,525	9,760	847	288	1,730	2,237	4,658	99,765
1974	119,915	10,545	887	362	1,793	2,410	5,093	109,370
1975	131,536	11,005	848	396	1,766	2,411	5,584	120,531
1976	145,256	12,072	825	589	1,690	2,619	6,349	133,184
1977	150,031	13,154	887	733	1,766	3,011	6,757	136,877
1978	151,108	13,690	946	871	1,717	3,226	6,930	137,418
1979	148,303	14,040	992	990	1,632	3,460	6,966	134,263
1980	147,936	14,383	975	1,190	1,800	3,326	7,092	133,553

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 11. Doctor's degrees by major field group: 1950–80

Year	All fields	Science/engineering fields						All other fields
		Total	Physical sciences	Engineering	Mathematical/computer sciences	Life sciences	Social sciences	
1950	6,633	3,890	1,498	417	160	1,033	782	2,743
1951	7,338	4,618	1,681	520	184	1,192	1,041	2,720
1952	7,683	4,783	1,720	529	206	1,187	1,141	2,900
1953	8,309	5,114	1,714	518	241	1,443	1,198	3,195
1954	8,996	5,433	1,686	594	227	1,628	1,298	3,563
1955	8,840	5,436	1,713	599	250	1,505	1,369	3,404
1956	8,903	5,327	1,667	610	235	1,404	1,411	3,576
1957	8,756	5,233	1,674	596	249	1,449	1,265	3,523
1958	8,942	5,353	1,655	647	247	1,465	1,339	3,589
1959	9,360	5,635	1,812	714	282	1,427	1,400	3,725
1960	9,829	6,056	1,838	786	303	1,647	1,482	3,773
1961	10,575	6,531	1,991	943	344	1,646	1,607	4,044
1962	11,622	7,249	2,122	1,207	396	1,804	1,720	4,373
1963	12,822	8,055	2,380	1,378	490	1,908	1,899	4,767
1964	14,490	9,025	2,455	1,693	596	2,181	2,100	5,465
1965	16,467	10,252	2,829	2,124	688	2,474	2,137	6,215
1966	18,239	11,298	3,045	2,304	801	2,696	2,452	6,941
1967	20,621	12,759	3,462	2,614	870	2,900	2,913	7,862
1968	23,091	14,128	3,593	2,932	983	3,445	3,175	8,963
1969	26,189	15,839	3,859	3,377	1,161	3,779	3,663	10,350
1970	29,872	17,639	4,313	3,681	1,343	4,131	4,171	12,233
1971	32,113	18,466	4,391	3,654	1,327	4,534	4,560	13,647
1972	33,369	18,412	4,103	3,704	1,295	4,478	4,832	14,957
1973	34,790	18,598	4,016	3,560	1,264	4,524	5,234	16,192
1974	33,826	17,865	3,631	3,336	1,229	4,220	5,449	15,961
1975	34,086	17,784	3,628	3,151	1,188	4,252	5,565	16,302
1976	34,076	17,288	3,433	2,835	1,100	4,203	5,717	16,788
1977	33,244	16,937	3,344	2,599	1,039	4,199	5,756	16,307
1978	32,156	16,196	3,137	2,442	1,001	4,179	5,437	15,960
1979	32,756	16,363	3,104	2,517	966	4,403	5,373	16,393
1980	32,632	16,483	3,095	2,519	964	4,495	5,410	16,149

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 12. Percentage distribution of doctor's degrees by major field group: 1950–80

Year	All fields	Science/engineering fields						All other fields
		Total	Physical sciences	Engineering	Mathematical/computer sciences	Life sciences	Social sciences	
1950	100.0	58.6	22.6	6.3	2.4	15.6	11.8	41.4
1951	100.0	62.9	22.9	7.1	2.5	16.2	14.2	37.1
1952	100.0	62.3	22.4	6.9	2.7	15.4	14.9	37.7
1953	100.0	61.5	20.6	6.2	2.9	17.4	14.4	38.5
1954	100.0	60.4	18.7	6.6	2.5	18.1	14.4	39.6
1955	100.0	61.5	19.4	6.8	2.8	17.0	15.5	38.5
1956	100.0	59.8	18.7	6.9	2.6	15.8	15.8	40.2
1957	100.0	59.8	19.1	6.8	2.8	16.5	14.4	40.2
1958	100.0	59.9	18.5	7.2	2.8	16.4	15.0	40.1
1959	100.0	60.2	19.4	7.6	3.0	15.2	15.0	39.8
1960	100.0	61.6	18.7	8.0	3.1	16.8	15.1	38.4
1961	100.0	61.8	18.8	8.9	3.3	15.6	15.2	38.2
1962	100.0	62.4	18.3	10.4	3.4	15.5	14.8	37.6
1963	100.0	62.8	18.6	10.7	3.8	14.9	14.8	37.2
1964	100.0	62.3	16.9	11.7	4.1	15.1	14.5	37.7
1965	100.0	62.3	17.2	12.9	4.2	15.0	13.0	37.7
1966	100.0	61.9	16.7	12.6	4.4	14.8	13.4	38.1
1967	100.0	61.9	16.8	12.7	4.2	14.1	14.1	38.1
1968	100.0	61.2	15.6	12.7	4.3	14.9	13.7	38.8
1969	100.0	60.5	14.7	12.9	4.4	14.4	14.0	39.5
1970	100.0	59.0	14.4	12.3	4.5	13.8	14.0	41.0
1971	100.0	57.5	13.7	11.4	4.1	14.1	14.2	42.5
1972	100.0	55.2	12.3	11.1	3.9	13.4	14.5	44.8
1973	100.0	53.5	11.5	10.2	3.6	13.0	15.0	46.5
1974	100.0	52.8	10.7	9.9	3.6	12.5	16.1	47.2
1975	100.0	52.2	10.6	9.2	3.5	12.5	16.3	47.8
1976	100.0	50.7	10.1	8.3	3.2	12.3	16.8	49.3
1977	100.0	50.9	10.1	7.8	3.1	12.6	17.3	49.1
1978	100.0	50.4	9.8	7.6	3.1	13.0	16.9	49.6
1979	100.0	50.0	9.5	7.7	2.9	13.4	16.4	50.0
1980	100.0	50.5	9.5	7.7	3.0	13.8	16.6	49.5

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 13. Doctor's degrees earned by men, by major field group: 1950–80

Year	All fields	Science/engineering fields						All other fields
		Total	Physical sciences	Engineering	Mathematical/computer sciences	Life sciences	Social sciences	
1950	5,990	3,646	1,449	416	151	938	692	2,344
1951	6,664	4,327	1,617	519	175	1,090	926	2,337
1952	6,969	4,489	1,663	526	195	1,093	1,012	2,480
1953	7,517	4,792	1,652	517	227	1,320	1,076	2,725
1954	8,181	5,123	1,625	594	213	1,517	1,174	3,058
1955	8,014	5,134	1,661	599	239	1,398	1,237	2,880
1956	8,018	4,978	1,599	610	225	1,281	1,263	3,040
1957	7,817	4,888	1,603	595	236	1,327	1,127	2,929
1958	7,978	4,975	1,589	643	232	1,321	1,190	3,003
1959	8,371	5,259	1,743	713	267	1,307	1,229	3,112
1960	8,801	5,674	1,776	783	285	1,521	1,309	3,127
1961	9,463	6,082	1,921	937	327	1,502	1,395	3,381
1962	10,377	6,748	2,035	1,203	372	1,643	1,495	3,629
1963	11,448	7,482	2,285	1,367	454	1,724	1,652	3,966
1964	12,955	8,393	2,342	1,686	567	1,978	1,820	4,562
1965	14,692	9,543	2,702	2,114	628	2,228	1,871	5,149
1966	16,121	10,423	2,914	2,295	744	2,382	2,088	5,698
1967	18,164	11,746	3,300	2,603	810	2,546	2,487	6,418
1968	20,185	12,924	3,405	2,920	931	2,993	2,675	7,261
1969	22,753	14,464	3,653	3,365	1,091	3,295	3,060	8,289
1970	25,892	16,112	4,077	3,657	1,245	3,632	3,501	9,780
1971	27,534	16,666	4,145	3,631	1,231	3,910	3,749	10,868
1972	28,095	16,502	3,830	3,679	1,194	3,831	3,968	11,593
1973	28,575	16,310	3,742	3,496	1,147	3,790	4,135	12,265
1974	27,374	15,453	3,378	3,281	1,120	3,488	4,186	11,921
1975	26,819	15,147	3,326	3,084	1,064	3,470	4,203	11,672
1976	26,273	14,502	3,133	2,766	983	3,412	4,208	11,771
1977	25,150	13,979	3,024	2,525	911	3,408	4,111	11,171
1978	23,669	13,157	2,825	2,385	862	3,307	3,778	10,512
1979	23,555	13,053	2,754	2,434	814	3,429	3,622	10,502
1980	22,950	12,940	2,709	2,423	837	3,445	3,526	10,010

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 14. Doctor's degrees earned by women, by major field group: 1950–80

Year	All fields	Science/engineering fields						All other fields
		Total	Physical sciences	Engineering	Mathematical/computer sciences	Life sciences	Social sciences	
1950	643	244	49	1	9	95	90	399
1951	674	291	64	1	9	102	115	383
1952	714	294	57	3	11	94	129	420
1953	792	322	62	1	14	123	122	470
1954	815	310	61	0	14	111	124	505
1955	826	302	52	0	11	107	132	524
1956	885	349	68	0	10	123	148	536
1957	939	345	71	1	13	122	138	594
1958	964	378	66	4	15	144	149	586
1959	989	376	69	1	15	120	171	613
1960	1,028	382	62	3	18	126	173	646
1961	1,112	449	70	6	17	144	212	663
1962	1,245	501	87	4	24	161	225	744
1963	1,374	573	95	11	36	184	247	801
1964	1,535	632	113	7	29	203	280	903
1965	1,775	709	127	10	60	246	266	1,066
1966	2,118	875	131	9	57	314	364	1,243
1967	2,457	1,013	162	11	60	354	426	1,444
1968	2,906	1,204	188	12	52	452	500	1,702
1969	3,436	1,375	206	12	70	484	603	2,061
1970	3,980	1,527	236	24	98	499	670	2,453
1971	4,579	1,800	246	23	96	624	811	2,779
1972	5,274	1,910	273	25	101	647	864	3,364
1973	6,215	2,288	274	64	117	734	1,099	3,927
1974	6,452	2,412	253	55	109	732	1,263	4,040
1975	7,267	2,637	302	67	124	782	1,362	4,630
1976	7,803	2,786	300	69	117	791	1,509	5,017
1977	8,094	2,958	320	74	128	791	1,645	5,136
1978	8,487	3,039	312	57	139	872	1,659	5,448
1979	9,201	3,310	350	83	152	974	1,751	5,891
1980	9,682	3,543	386	96	127	1,050	1,884	6,139

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 15. Physical sciences degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	17,725	15,988	1,737	3,184	2,919	265	1,498	1,449	49
1951	14,296	12,876	1,420	3,200	2,974	226	1,681	1,617	64
1952	12,145	10,813	1,332	3,054	2,830	224	1,720	1,663	57
1953	10,414	9,137	1,277	2,711	2,547	164	1,714	1,652	62
1954	9,880	8,607	1,273	2,374	2,197	177	1,686	1,625	61
1955	10,516	9,134	1,382	2,544	2,337	207	1,713	1,661	52
1956	11,672	10,171	1,501	2,655	2,435	220	1,667	1,599	68
1957	12,934	11,321	1,613	2,704	2,483	221	1,674	1,603	71
1958	14,352	12,683	1,669	3,034	2,763	271	1,655	1,589	66
1959	15,460	13,694	1,766	3,179	2,909	270	1,812	1,743	69
1960	16,057	14,041	2,016	3,387	3,060	327	1,838	1,776	62
1961	15,500	13,492	2,008	3,799	3,454	345	1,991	1,921	70
1962	15,894	13,748	2,146	3,929	3,544	385	2,122	2,035	87
1963	16,276	14,038	2,238	4,132	3,704	428	2,380	2,285	95
1964	17,527	15,077	2,450	4,567	4,157	410	2,455	2,342	113
1965	17,916	15,384	2,532	4,918	4,405	513	2,829	2,702	127
1966	17,186	14,853	2,333	4,992	4,464	528	3,045	2,914	131
1967	17,794	15,392	2,402	5,412	4,859	553	3,462	3,300	162
1968	19,442	16,768	2,674	5,508	4,873	635	3,593	3,405	188
1969	21,591	18,639	2,952	5,911	5,243	668	3,859	3,653	206
1970	21,551	18,582	2,969	5,948	5,101	847	4,313	4,077	236
1971	21,549	18,535	3,014	6,386	5,533	853	4,391	4,145	246
1972	20,887	17,739	3,148	6,307	5,419	888	4,103	3,830	273
1973	20,809	17,688	3,121	6,274	5,427	847	4,016	3,742	274
1974	21,287	17,751	3,536	6,087	5,200	887	3,631	3,378	253
1975	20,896	17,058	3,838	5,830	4,982	848	3,628	3,326	302
1976	21,559	17,420	4,139	5,485	4,660	825	3,433	3,133	300
1977	22,618	18,067	4,551	5,345	4,458	887	3,344	3,024	320
1978	23,175	18,188	4,987	5,576	4,630	946	3,137	2,825	312
1979	23,363	18,076	5,287	5,464	4,472	992	3,104	2,754	350
1980	23,361	18,010	5,651	5,233	4,258	975	3,095	2,709	386

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 16. Physics degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	3,414	3,287	127	922	888	34	358	353	5
1951	2,788	2,671	117	973	934	39	443	435	8
1952	2,247	2,141	106	886	851	35	485	476	9
1953	2,005	1,921	84	721	686	35	478	472	6
1954	1,952	1,877	75	714	685	29	485	479	6
1955	1,996	1,920	76	729	701	28	511	499	12
1956	2,335	2,233	102	742	719	23	470	462	8
1957	2,745	2,623	122	825	797	28	453	439	14
1958	3,186	3,042	144	795	770	25	464	455	9
1959	3,809	3,668	141	915	885	30	482	473	9
1960	4,338	4,166	172	1,073	1,038	35	487	477	10
1961	4,322	4,092	230	1,271	1,221	50	564	558	6
1962	4,812	4,624	188	1,425	1,363	62	667	655	12
1963	4,785	4,548	237	1,567	1,491	76	752	742	10
1964	4,956	4,715	241	1,848	1,782	66	778	767	11
1965	4,954	4,708	246	1,906	1,826	80	942	922	20
1966	4,609	4,385	224	1,949	1,869	80	973	952	21
1967	4,733	4,466	267	2,111	2,015	96	1,183	1,153	30
1968	5,045	4,749	296	2,088	1,993	95	1,260	1,234	26
1969	5,535	5,213	322	2,259	2,139	120	1,296	1,264	32
1970	5,333	5,004	329	2,205	2,047	158	1,439	1,402	37
1971	5,076	4,733	343	2,194	2,042	152	1,482	1,439	43
1972	4,645	4,322	323	2,035	1,876	159	1,344	1,301	43
1973	4,268	3,955	313	1,755	1,642	113	1,338	1,287	51
1974	3,962	3,625	337	1,662	1,526	136	1,115	1,068	47
1975	3,716	3,354	362	1,577	1,453	124	1,080	1,028	52
1976	3,544	3,156	388	1,451	1,319	132	997	952	45
1977	3,420	3,062	358	1,319	1,193	126	945	890	55
1978	3,330	2,961	369	1,294	1,171	123	873	824	49
1979	3,338	2,939	399	1,319	1,184	135	918	852	66
1980	3,397	2,963	434	1,192	1,074	118	830	767	63

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 17. Chemistry degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	10,619	9,134	1,485	1,576	1,368	208	953	914	39
1951	8,258	7,036	1,222	1,462	1,300	162	1,046	994	52
1952	6,819	5,717	1,102	1,409	1,242	167	1,031	986	45
1953	5,943	4,870	1,073	1,211	1,095	116	999	948	51
1954	5,791	4,727	1,064	1,098	972	126	1,013	968	45
1955	5,920	4,781	1,139	1,173	1,036	137	1,005	969	36
1956	6,178	4,996	1,182	1,164	1,035	129	986	934	52
1957	6,591	5,297	1,294	1,047	913	134	1,003	955	48
1958	7,010	5,705	1,305	1,125	958	167	939	890	49
1959	7,308	5,897	1,411	1,145	981	164	1,009	960	49
1960	7,603	6,005	1,598	1,228	1,025	203	1,048	1,000	48
1961	7,604	6,096	1,508	1,313	1,113	200	1,131	1,074	57
1962	8,089	6,374	1,715	1,425	1,179	246	1,139	1,070	69
1963	8,823	7,055	1,768	1,463	1,204	259	1,254	1,176	78
1964	9,724	7,810	1,914	1,586	1,306	280	1,301	1,208	93
1965	10,047	8,111	1,936	1,715	1,387	328	1,414	1,313	101
1966	9,735	7,934	1,801	1,839	1,484	355	1,571	1,477	94
1967	9,872	8,101	1,771	1,831	1,484	347	1,744	1,626	118
1968	10,847	8,882	1,965	2,014	1,596	418	1,757	1,615	142
1969	11,807	9,651	2,156	2,070	1,689	381	1,941	1,796	145
1970	11,617	9,501	2,116	2,146	1,666	480	2,208	2,039	169
1971	11,183	9,088	2,095	2,284	1,792	492	2,160	1,987	173
1972	10,721	8,601	2,120	2,259	1,754	505	1,971	1,778	193
1973	10,226	8,259	1,967	2,230	1,763	467	1,882	1,698	184
1974	10,525	8,413	2,112	2,138	1,664	474	1,828	1,655	173
1975	10,649	8,264	2,385	2,006	1,590	416	1,824	1,619	205
1976	11,107	8,610	2,497	1,796	1,413	383	1,623	1,426	197
1977	11,322	8,720	2,602	1,775	1,327	448	1,571	1,383	188
1978	11,474	8,593	2,881	1,892	1,447	445	1,525	1,322	203
1979	11,643	8,530	3,113	1,765	1,318	447	1,518	1,288	230
1980	11,446	8,169	3,277	1,733	1,286	447	1,551	1,291	260

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 18. Geological sciences degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	3,043	2,934	109	493	477	16	113	110	3
1951	2,717	2,643	74	565	543	22	123	120	3
1952	2,102	2,026	76	486	469	17	116	116	0
1953	1,719	1,651	68	517	509	8	133	130	3
1954	1,632	1,553	79	412	397	15	136	130	6
1955	1,795	1,703	92	507	481	26	154	152	2
1956	2,163	2,085	78	508	494	14	135	134	1
1957	2,570	2,481	89	567	551	16	141	138	3
1958	2,827	2,723	104	718	697	21	151	148	3
1959	2,878	2,787	91	672	658	14	198	193	5
1960	2,465	2,390	75	591	577	14	201	197	4
1961	1,870	1,793	77	577	564	13	202	199	3
1962	1,430	1,361	69	594	573	21	199	196	3
1963	1,087	1,023	64	561	536	25	265	260	5
1964	1,113	1,019	94	555	533	22	237	232	5
1965	1,131	1,012	119	511	486	25	274	273	1
1966	1,329	1,202	127	525	491	34	290	280	10
1967	1,458	1,295	163	600	564	36	285	280	5
1968	1,718	1,540	178	655	605	50	280	274	6
1969	2,014	1,809	205	675	614	61	314	296	18
1970	2,286	2,040	246	610	543	67	283	274	9
1971	2,415	2,150	265	651	588	63	324	313	11
1972	2,573	2,247	326	841	751	90	310	294	16
1973	2,929	2,540	389	827	742	85	305	293	12
1974	3,256	2,723	533	938	839	99	315	305	10
1975	3,324	2,749	575	932	816	116	292	279	13
1976	3,362	2,756	606	1,003	873	130	313	290	23
1977	3,879	3,043	836	1,047	926	121	325	302	23
1978	4,344	3,386	958	1,239	1,026	213	268	242	26
1979	4,503	3,445	1,058	1,300	1,058	242	286	259	27
1980	4,600	3,469	1,131	1,295	1,058	237	313	287	26

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 19. Other physical sciences degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	649	633	16	193	186	7	74	72	2
1951	533	526	7	200	197	3	69	68	1
1952	977	929	48	273	268	5	88	85	3
1953	747	695	52	262	257	5	104	102	2
1954	505	450	55	150	143	7	52	48	4
1955	805	730	75	135	119	16	43	41	2
1956	996	857	139	241	187	54	76	69	7
1957	1,028	920	108	265	222	43	77	71	6
1958	1,329	1,213	116	396	338	58	101	96	5
1959	1,465	1,342	123	447	385	62	123	117	6
1960	1,651	1,480	171	495	420	75	102	102	0
1961	1,704	1,511	193	638	556	82	94	90	4
1962	1,563	1,389	174	485	429	56	117	114	3
1963	1,581	1,412	169	541	473	68	109	107	2
1964	1,734	1,534	200	578	536	42	139	135	4
1965	1,784	1,553	231	786	706	80	199	194	5
1966	1,513	1,332	181	679	620	59	211	205	6
1967	1,731	1,530	201	870	796	74	250	241	9
1968	1,832	1,597	235	751	679	72	296	282	14
1969	2,235	1,966	269	907	801	106	308	297	11
1970	2,315	2,037	278	987	845	142	383	362	21
1971	2,875	2,564	311	1,257	1,111	146	425	406	19
1972	2,948	2,569	379	1,172	1,038	134	478	457	21
1973	3,386	2,934	452	1,462	1,280	182	491	464	27
1974	[illegible]	2,990	554	1,349	1,171	178	373	350	23
1975	3,207	2,691	516	1,315	1,123	192	432	400	32
1976	3,546	2,898	648	1,235	1,055	180	500	465	35
1977	3,997	3,242	755	1,204	1,012	192	503	449	54
1978	4,027	3,248	779	1,151	986	165	471	437	34
1979	3,879	3,162	717	1,080	912	168	382	355	27
1980	4,218	3,409	809	1,013	840	173	401	364	37

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 20. Engineering degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	52,246	52,071	175	4,496	4,481	15	417	416	1
1951	41,473	41,386	87	4,825	4,815	10	520	519	1
1952	30,549	30,489	60	4,091	4,073	18	529	526	3
1953	24,189	24,152	37	3,566	3,553	13	518	517	1
1954	22,329	22,264	65	4,204	4,189	15	594	594	0
1955	22,589	22,527	62	4,484	4,471	13	599	599	0
1956	26,312	26,236	76	4,724	4,705	19	610	610	0
1957	31,211	31,130	81	5,233	5,217	16	596	595	1
1958	35,332	35,223	109	5,788	5,768	20	647	643	4
1959	38,134	38,013	121	6,753	6,729	24	714	713	1
1960	37,808	37,663	145	7,159	7,133	26	786	783	3
1961	35,866	35,732	134	8,178	8,150	28	943	937	6
1962	34,735	34,610	125	8,909	8,869	40	1,207	1,203	4
1963	33,458	33,328	130	9,635	9,603	32	1,378	1,367	11
1964	35,226	35,067	159	10,827	10,793	34	1,693	1,686	7
1965	36,795	36,656	139	12,056	12,012	44	2,124	2,114	10
1966	35,815	35,669	146	13,678	13,602	76	2,304	2,295	9
1967	36,188	36,004	184	13,885	13,807	78	2,614	2,603	11
1968	37,614	37,403	211	15,188	15,089	99	2,932	2,920	12
1969	41,553	41,240	313	15,243	15,130	113	3,377	3,365	12
1970	44,772	44,434	338	15,597	15,425	172	3,681	3,657	24
1971	45,387	45,022	365	16,347	16,160	187	3,654	3,631	23
1972	46,003	45,502	501	16,802	16,521	281	3,704	3,679	25
1973	46,989	46,409	580	16,758	16,470	288	3,560	3,496	64
1974	43,530	42,824	706	15,393	15,031	362	3,336	3,281	55
1975	40,065	39,205	860	15,434	15,038	396	3,151	3,084	67
1976	39,114	37,671	1,443	16,170	15,581	589	2,835	2,766	69
1977	41,581	39,495	2,086	16,889	16,156	733	2,599	2,525	74
1978	47,411	43,914	3,497	17,015	16,144	871	2,442	2,385	57
1979	53,720	48,801	4,919	16,193	15,203	990	2,517	2,434	83
1980	59,240	53,226	6,014	16,846	15,656	1,190	2,519	2,423	96

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 21. Aeronautical/astronautical engineering degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	1,712	1,698	14	373	372	1	23	23	0
1951	1,481	1,472	9	332	331	1	26	25	1
1952	911	900	11	231	231	0	25	25	0
1953	738	734	4	210	209	1	32	32	0
1954	660	659	1	219	218	1	43	43	0
1955	686	683	3	204	202	2	23	23	0
1956	895	893	2	216	213	3	36	36	0
1957	1,109	1,104	5	256	254	2	32	32	0
1958	1,337	1,330	7	301	300	1	26	25	1
1959	1,551	1,545	6	331	330	1	24	24	0
1960	1,698	1,692	6	342	342	0	23	22	1
1961	1,666	1,661	5	437	434	3	42	41	1
1962	1,440	1,435	5	469	466	3	54	54	0
1963	1,292	1,288	4	575	571	4	70	67	3
1964	1,455	1,448	7	658	655	3	72	71	1
1965	1,717	1,709	8	699	693	6	91	91	0
1966	1,683	1,678	5	798	792	6	105	105	0
1967	1,914	1,900	14	802	800	2	142	142	0
1968	2,072	2,060	12	841	835	6	162	161	1
1969	2,625	2,606	19	835	828	7	207	207	0
1970	2,756	2,736	20	749	746	3	211	209	2
1971	2,443	2,426	17	717	711	6	217	214	3
1972	2,180	2,160	20	687	680	7	197	197	0
1973	1,738	1,720	18	563	561	2	171	170	1
1974	1,210	1,192	18	557	548	9	173	170	3
1975	1,174	1,150	24	477	470	7	163	161	2
1976	1,009	980	29	479	469	10	139	137	2
1977	1,078	1,050	28	385	377	8	119	115	4
1978	1,186	1,125	61	411	400	11	115	113	2
1979	1,386	1,320	66	372	355	17	95	95	0
1980	1,424	1,342	82	382	373	9	99	98	1

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 22. Chemical engineering degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	4,506	4,474	32	699	698	1	173	172	1
1951	3,707	3,687	20	740	738	2	171	171	0
1952	2,857	2,849	8	587	582	5	168	168	0
1953	2,258	2,253	5	431	429	2	147	147	0
1954	2,042	2,033	9	448	446	2	133	133	0
1955	2,027	2,014	13	470	469	1	139	139	0
1956	2,466	2,444	22	545	542	3	136	136	0
1957	2,818	2,796	22	402	401	1	146	146	0
1958	3,008	2,986	22	561	557	4	127	126	1
1959	3,131	3,111	20	596	593	3	143	143	0
1960	2,966	2,935	31	617	611	6	170	170	0
1961	2,864	2,845	19	650	648	2	171	171	0
1962	2,677	2,657	20	676	669	7	225	224	1
1963	2,724	2,698	26	711	709	2	238	236	2
1964	2,998	2,970	28	762	757	5	262	261	1
1965	3,076	3,050	26	806	803	3	364	362	2
1966	2,848	2,825	23	994	987	7	354	351	3
1967	2,869	2,841	28	949	942	7	305	303	2
1968	3,211	3,181	30	1,156	1,142	14	367	364	3
1969	3,557	3,504	53	1,136	1,127	9	409	406	3
1970	3,720	3,663	57	1,045	1,028	17	438	434	4
1971	3,615	3,552	63	1,100	1,074	26	406	404	2
1972	3,663	3,587	76	1,154	1,126	28	394	393	1
1973	3,636	3,546	90	1,051	1,030	21	397	395	2
1974	3,454	3,337	117	1,045	1,014	31	400	390	10
1975	3,142	3,001	141	990	965	25	346	342	4
1976	3,203	2,927	276	1,031	992	39	308	299	9
1977	3,581	3,152	429	1,086	1,021	65	291	283	8
1978	4,615	3,899	716	1,237	1,150	87	259	252	7
1979	5,655	4,649	1,006	1,149	1,035	114	304	296	8
1980	6,383	5,168	1,215	1,271	1,138	133	284	269	15

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 23. Civil, construction, and transportation engineering degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	7,781	7,761	20	689	686	3	28	28	0
1951	7,050	7,043	7	630	629	1	52	52	0
1952	5,329	5,322	7	583	582	1	45	45	0
1953	4,396	4,389	7	566	565	1	40	40	0
1954	3,955	3,948	7	565	562	3	43	43	0
1955	3,868	3,860	8	693	690	3	29	29	0
1956	4,227	4,216	11	822	821	1	59	59	0
1957	4,683	4,674	9	850	846	4	39	39	0
1958	5,134	5,121	13	810	809	1	69	69	0
1959	5,394	5,375	19	926	921	5	70	70	0
1960	5,303	5,288	15	1,052	1,051	1	74	73	1
1961	5,385	5,360	25	1,247	1,246	1	117	116	1
1962	5,235	5,212	23	1,286	1,277	9	145	145	0
1963	4,854	4,836	18	1,410	1,406	4	142	140	2
1964	5,077	5,053	24	1,567	1,561	6	218	217	1
1965	5,200	5,187	13	1,686	1,681	5	252	250	2
1966	5,335	5,316	19	2,007	2,000	7	283	282	1
1967	5,147	5,124	23	2,019	2,001	18	296	295	1
1968	5,508	5,480	28	2,137	2,123	14	376	376	0
1969	6,001	5,958	43	2,201	2,189	12	381	381	0
1970	6,524	6,477	47	2,242	2,223	19	411	409	2
1971	6,613	6,559	54	2,431	2,403	28	446	443	3
1972	6,909	6,842	67	2,487	2,449	38	415	413	2
1973	7,502	7,424	78	2,629	2,591	38	397	388	9
1974	8,145	8,016	129	2,653	2,604	49	368	364	4
1975	7,790	7,640	150	2,771	2,697	74	356	347	9
1976	8,059	7,807	252	3,000	2,901	99	370	361	9
1977	8,376	7,943	433	2,969	2,840	129	309	303	6
1978	9,265	8,575	690	2,691	2,559	132	277	271	6
1979	9,941	8,986	955	2,655	2,512	143	253	249	4
1980	10,442	9,451	991	2,683	2,486	197	270	264	6

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 24. Electrical, electronics, and communications engineering degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	13,270	13,231	39	1,057	1,055	2	80	80	0
1951	9,488	9,477	11	1,114	1,114	0	113	113	0
1952	6,453	6,446	7	1,008	1,005	3	120	117	3
1953	4,899	4,892	7	880	879	1	132	131	1
1954	4,485	4,475	10	978	977	1	111	111	0
1955	4,860	4,847	13	1,074	1,072	2	141	141	0
1956	6,222	6,211	11	1,161	1,158	3	136	136	0
1957	8,108	8,097	11	1,312	1,310	2	130	130	0
1958	9,567	9,548	19	1,570	1,565	5	144	143	1
1959	10,786	10,756	30	1,846	1,840	6	189	189	0
1960	10,631	10,599	32	1,993	1,989	4	203	202	1
1961	10,200	10,175	25	2,414	2,410	4	250	249	1
1962	10,263	10,229	34	2,701	2,691	10	295	294	1
1963	10,393	10,362	31	2,816	2,807	9	386	384	2
1964	11,261	11,228	33	3,163	3,157	6	460	458	2
1965	11,730	11,694	36	3,505	3,498	7	511	509	2
1966	11,007	10,978	29	3,872	3,850	22	569	567	2
1967	10,843	10,801	42	3,953	3,942	11	668	668	0
1968	10,725	10,682	43	4,226	4,204	22	723	723	0
1969	11,695	11,629	66	4,033	4,011	22	862	858	4
1970	12,288	12,220	68	4,138	4,109	29	882	879	3
1971	12,288	12,212	76	4,282	4,252	30	879	876	3
1972	12,181	12,099	82	4,209	4,157	52	824	821	3
1973	12,377	12,219	158	3,899	3,850	49	791	782	9
1974	11,419	11,302	117	3,499	3,444	55	705	697	8
1975	10,246	10,116	130	3,471	3,413	58	701	690	11
1976	9,874	9,681	193	3,774	3,670	104	649	635	14
1977	10,018	9,750	268	3,788	3,654	134	566	548	18
1978	11,213	10,778	435	3,742	3,600	142	503	490	13
1979	12,440	11,781	659	3,596	3,453	143	586	572	14
1980	13,902	13,000	902	3,842	3,658	184	525	511	14

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 25. Industrial and management engineering degrees by level and sex: 1954–80[1]

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1954	1,342	1,338	4	375	373	2	6	5	1
1955	1,448	1,444	4	373	372	1	9	9	0
1956	1,651	1,646	5	354	354	0	10	10	0
1957	1,926	1,919	7	395	394	1	17	17	0
1958	2,108	2,105	3	486	485	1	9	9	0
1959	2,297	2,291	6	578	578	0	12	12	0
1960	2,242	2,232	10	468	467	1	13	13	0
1961	2,084	2,077	7	458	458	0	19	19	0
1962	1,904	1,896	8	508	508	0	26	25	1
1963	1,861	1,851	10	603	603	0	23	23	0
1964	2,194	2,186	8	808	807	1	32	32	0
1965	2,236	2,230	6	1,013	1,010	3	61	60	1
1966	2,335	2,325	10	1,200	1,194	6	45	45	0
1967	2,366	2,357	9	1,341	1,331	10	64	62	2
1968	2,727	2,712	15	1,512	1,503	9	79	77	2
1969	3,000	2,984	16	1,453	1,445	8	115	115	0
1970	3,199	3,178	21	1,763	1,746	17	126	123	3
1971	3,210	3,190	20	1,921	1,898	23	139	136	3
1972	3,713	3,673	40	1,731	1,706	25	168	168	0
1973	3,508	3,477	31	1,595	1,566	29	130	127	3
1974	2,921	2,877	44	1,734	1,689	45	146	144	2
1975	2,583	2,524	59	1,687	1,631	56	119	114	5
1976	2,241	2,154	87	1,751	1,670	81	121	118	3
1977	2,264	2,115	149	1,609	1,534	75	104	99	5
1978	2,712	2,389	323	1,722	1,584	138	118	113	5
1979	2,804	2,376	428	1,502	1,374	128	149	135	14
1980	3,217	2,672	545	1,313	1,180	133	116	109	7

[1]Degrees in industrial and management engineering not separately collected prior to 1954.

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education.

Table 26. Mechanical engineering degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	14,441	14,414	27	784	781	3	46	46	0
1951	10,798	10,783	15	913	910	3	67	67	0
1952	7,685	7,677	8	660	656	4	72	72	0
1953	5,964	5,959	5	667	667	0	84	84	0
1954	5,419	5,410	9	723	723	0	72	72	0
1955	5,876	5,867	9	759	758	1	79	79	0
1956	6,728	6,717	11	765	763	2	61	61	0
1957	7,907	7,892	15	812	809	3	67	67	0
1958	9,060	9,041	19	952	952	0	76	76	0
1959	9,592	9,580	12	1,081	1,080	1	83	82	1
1960	9,597	9,577	20	1,179	1,175	4	107	107	0
1961	8,651	8,629	22	1,401	1,396	5	106	106	0
1962	8,473	8,460	13	1,531	1,529	2	159	159	0
1963	7,697	7,674	23	1,664	1,664	0	164	164	0
1964	7,697	7,680	17	1,886	1,883	3	200	200	0
1965	8,035	8,019	16	2,036	2,031	5	265	265	0
1966	7,811	7,792	19	2,154	2,147	7	289	289	0
1967	7,890	7,870	20	2,176	2,169	7	354	353	1
1968	7,930	7,898	32	2,136	2,130	6	395	394	1
1969	8,514	8,474	40	2,299	2,295	4	425	425	0
1970	9,310	9,271	39	2,298	2,286	12	435	435	0
1971	8,917	8,876	41	2,238	2,233	5	438	438	0
1972	8,574	8,526	48	2,283	2,265	18	411	410	1
1973	8,584	8,523	61	2,142	2,123	19	370	367	3
1974	7,737	7,674	63	1,844	1,823	21	385	379	6
1975	6,949	6,867	82	1,860	1,845	15	340	336	4
1976	6,841	6,694	147	1,907	1,880	27	305	303	2
1977	7,771	7,535	236	1,953	1,904	49	283	280	3
1978	8,924	8,458	466	1,943	1,886	57	279	273	6
1979	10,171	9,568	603	1,878	1,811	67	271	268	3
1980	11,863	10,981	882	2,060	1,962	98	281	277	4

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 27. Other engineering degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	10,536	10,493	43	894	889	5	67	67	0
1951	8,949	8,924	25	1,096	1,093	3	91	91	0
1952	7,314	7,295	19	1,022	1,017	5	99	99	0
1953	5,934	5,925	9	812	804	8	83	83	0
1954	4,333	4,311	22	869	865	4	182	182	0
1955	3,824	3,812	12	911	908	3	179	179	0
1956	4,117	4,103	14	861	854	7	172	172	0
1957	4,660	4,648	12	1,206	1,203	3	165	164	1
1958	5,118	5,092	26	1,108	1,100	8	196	195	1
1959	5,383	5,355	28	1,395	1,387	8	193	193	0
1960	5,371	5,340	31	1,508	1,498	10	196	196	0
1961	5,016	4,985	31	1,571	1,558	13	238	235	3
1962	4,743	4,721	22	1,738	1,729	9	303	302	1
1963	4,637	4,619	18	1,856	1,843	13	355	353	2
1964	4,544	4,502	42	1,983	1,973	10	449	447	2
1965	4,801	4,767	34	2,311	2,296	15	576	573	3
1966	4,796	4,755	41	2,653	2,632	21	659	656	3
1967	5,159	5,111	48	2,645	2,622	23	785	780	5
1968	5,441	5,390	51	3,180	3,152	28	830	825	5
1969	6,161	6,085	76	3,286	3,235	51	978	973	5
1970	6,975	6,889	86	3,362	3,287	75	1,178	1,168	10
1971	8,301	8,207	94	3,658	3,589	69	1,129	1,120	9
1972	8,783	8,615	168	4,251	4,138	113	1,295	1,277	18
1973	9,644	9,500	144	4,879	4,749	130	1,304	1,267	37
1974	8,644	8,426	218	4,061	3,909	152	1,159	1,137	22
1975	8,181	7,907	274	4,178	4,017	161	1,126	1,094	32
1976	7,887	7,428	459	4,228	3,999	229	943	913	30
1977	8,493	7,950	543	5,099	4,826	273	927	897	30
1978	9,496	8,690	806	5,269	4,965	304	891	873	18
1979	11,323	10,121	1,202	5,041	4,663	378	859	819	40
1980	12,009	10,612	1,397	5,295	4,859	436	944	895	49

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 28. Mathematical/computer sciences degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	6,392	4,946	1,446	974	784	190	160	151	9
1951	5,753	4,311	1,442	1,109	929	180	184	175	9
1952	4,721	3,389	1,332	802	663	139	206	195	11
1953	4,396	3,122	1,274	677	565	112	241	227	14
1954	4,090	2,722	1,368	706	579	127	227	213	14
1955	4,034	2,724	1,310	761	613	148	250	239	11
1956	4,660	3,137	1,523	898	719	179	235	225	10
1957	5,546	3,826	1,720	965	777	188	249	236	13
1958	6,924	4,953	1,971	1,234	994	240	247	232	15
1959	9,019	6,504	2,515	1,499	1,188	311	282	267	15
1960	11,437	8,312	3,125	1,765	1,428	337	303	285	18
1961	13,127	9,483	3,644	2,238	1,772	466	344	327	17
1962	14,610	10,355	4,255	2,680	2,179	501	396	372	24
1963	16,121	11,163	4,958	3,323	2,665	658	490	454	36
1964	18,677	12,682	5,995	3,603	2,914	689	596	567	29
1965	19,668	13,215	6,453	4,294	3,482	812	688	628	60
1966	20,182	13,480	6,702	5,010	3,992	1,018	801	744	57
1967	21,530	14,196	7,334	5,733	4,423	1,310	870	810	60
1968	24,084	15,243	8,841	6,081	4,720	1,361	983	931	52
1969	28,263	17,915	10,348	6,735	5,169	1,566	1,161	1,091	70
1970	29,109	18,593	10,516	7,107	5,298	1,809	1,343	1,245	98
1971	27,306	17,488	9,818	6,789	5,101	1,688	1,327	1,231	96
1972	27,250	17,466	9,784	7,186	5,409	1,777	1,295	1,194	101
1973	27,528	17,543	9,985	7,146	5,416	1,730	1,264	1,147	117
1974	26,570	16,851	9,719	7,116	5,323	1,793	1,229	1,120	109
1975	23,385	14,729	8,656	6,637	4,871	1,766	1,188	1,064	124
1976	21,749	14,071	7,678	6,466	4,776	1,690	1,100	983	117
1977	20,729	13,241	7,488	6,496	4,730	1,766	1,039	911	128
1978	19,925	12,815	7,110	6,421	4,704	1,717	1,001	862	139
1979	20,670	13,249	7,421	6,101	4,469	1,632	966	814	152
1980	22,686	14,439	8,247	6,515	4,715	1,800	964	837	127

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 29. Mathematics degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	6,392	4,946	1,446	974	784	190	160	151	9
1951	5,753	4,311	1,442	1,109	929	180	184	175	9
1952	4,721	3,389	1,332	802	663	139	206	195	11
1953	4,396	3,122	1,274	677	565	112	241	227	14
1954	4,090	2,722	1,368	706	579	127	227	213	14
1955	4,034	2,724	1,310	761	613	148	250	239	11
1956	4,660	3,137	1,523	898	719	179	235	225	10
1957	5,546	3,826	1,720	965	777	188	249	236	13
1958	6,924	4,953	1,971	1,234	994	240	247	232	15
1959	9,019	6,504	2,515	1,499	1,188	311	282	267	15
1960	11,437	8,312	3,125	1,765	1,428	337	303	285	18
1961	13,127	9,483	3,644	2,238	1,772	466	344	327	17
1962	14,610	10,355	4,255	2,680	2,179	501	396	372	24
1963	16,121	11,163	4,958	3,323	2,665	658	490	454	36
1964	18,677	12,682	5,995	3,603	2,914	689	596	567	29
1965	19,581	13,132	6,449	4,148	3,342	806	682	623	59
1966	20,093	13,404	6,689	4,772	3,771	1,001	782	725	57
1967	21,308	13,998	7,310	5,284	4,000	1,284	832	773	59
1968	23,625	14,839	8,786	5,533	4,202	1,331	947	895	52
1969	27,330	17,103	10,227	5,723	4,230	1,493	1,097	1,029	68
1970	27,565	17,248	10,317	5,648	3,974	1,674	1,236	1,140	96
1971	24,918	15,424	9,494	5,201	3,677	1,524	1,199	1,106	93
1972	23,848	14,525	9,323	5,209	3,657	1,552	1,128	1,039	89
1973	23,223	13,878	9,345	5,033	3,528	1,505	1,068	966	102
1974	21,813	12,874	8,939	4,840	3,340	1,500	1,031	931	100
1975	18,346	10,646	7,700	4,338	2,910	1,428	975	865	110
1976	16,085	9,531	6,554	3,863	2,550	1,313	856	762	94
1977	14,303	8,354	5,949	3,698	2,398	1,300	823	714	109
1978	12,701	7,455	5,246	3,383	2,233	1,150	805	681	124
1979	11,901	6,943	4,958	3,046	1,989	1,057	730	608	122
1980	11,473	6,625	4,848	2,868	1,832	1,036	724	624	100

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 30. Computer and information sciences degrees by level and sex: 1965–80[1]

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1965	87	83	4	146	140	6	6	5	1
1966	89	76	13	238	221	17	19	19	0
1967	222	198	24	449	423	26	38	37	1
1968	459	404	55	548	518	30	36	36	0
1969	933	812	121	1,012	939	73	64	62	2
1970	1,544	1,345	199	1,459	1,324	135	107	105	2
1971	2,388	2,064	324	1,588	1,424	164	128	125	3
1972	3,402	2,941	461	1,977	1,752	225	167	155	12
1973	4,305	3,665	640	2,113	1,888	225	196	181	15
1974	4,757	3,977	780	2,276	1,983	293	198	189	9
1975	5,039	4,083	956	2,299	1,961	338	213	199	14
1976	5,664	4,540	1,124	2,603	2,226	377	244	221	23
1977	6,426	4,887	1,539	2,798	2,332	466	216	197	19
1978	7,224	5,360	1,864	3,038	2,471	567	196	181	15
1979	8,769	6,306	2,463	3,055	2,480	575	236	206	30
1980	11,213	7,814	3,399	3,647	2,883	764	240	213	27

[1]Degrees in computer and information sciences not separately collected prior to 1965.

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 31. Life sciences degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	39,101	34,173	4,928	4,158	3,624	534	782	692	90
1951	32,271	28,018	4,253	4,417	3,890	527	1,041	926	115
1952	25,231	21,426	3,805	4,184	3,717	467	1,141	1,012	129
1953	21,835	18,360	3,475	3,568	3,158	410	1,198	1,076	122
1954	21,584	18,079	3,505	3,007	2,649	358	1,298	1,174	124
1955	19,927	16,677	3,250	3,090	2,657	433	1,505	1,398	107
1956	19,890	16,508	3,382	2,867	2,461	406	1,404	1,281	123
1957	21,903	18,327	3,576	3,019	2,616	403	1,449	1,327	122
1958	23,069	19,399	3,670	3,179	2,721	458	1,465	1,321	144
1959	23,861	19,734	4,127	3,537	2,976	561	1,427	1,307	120
1960	24,141	19,650	4,491	3,751	3,178	573	1,647	1,521	126
1961	23,900	19,078	4,822	4,085	3,415	670	1,646	1,502	144
1962	25,200	19,730	5,470	4,672	3,887	785	1,804	1,643	161
1963	27,801	21,627	6,174	4,718	3,824	894	1,908	1,724	184
1964	31,611	24,398	7,213	5,357	4,273	1,084	2,181	1,978	203
1965	34,842	26,565	8,277	5,978	4,816	1,162	2,474	2,228	246
1966	36,864	28,400	8,464	6,666	5,286	1,380	2,696	2,382	314
1967	39,408	30,460	8,948	7,465	5,948	1,517	2,900	2,546	354
1968	43,260	33,169	10,091	8,315	6,451	1,864	3,445	2,993	452
1969	48,713	37,405	11,308	8,809	6,793	2,016	3,779	3,295	484
1970	52,129	40,254	11,875	8,590	6,374	2,216	4,131	3,632	499
1971	51,461	39,658	11,803	8,320	6,130	2,190	4,534	3,910	624
1972	53,484	40,790	12,694	8,914	6,587	2,327	4,478	3,831	647
1973	59,486	44,916	14,570	9,080	6,843	2,237	4,524	3,790	734
1974	68,226	50,390	17,836	9,605	7,195	2,410	4,220	3,488	732
1975	72,710	51,899	20,811	9,618	7,207	2,411	4,252	3,470	782
1976	77,301	53,512	23,789	9,823	7,204	2,619	4,203	3,412	791
1977	78,472	52,863	25,609	10,707	7,696	3,011	4,199	3,408	791
1978	77,138	50,184	26,954	10,711	7,485	3,226	4,179	3,307	872
1979	75,085	47,537	27,548	10,719	7,259	3,460	4,403	3,429	974
1980	71,617	44,021	27,596	10,278	6,952	3,326	4,495	3,445	1,050

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 32. Agriculture and natural resources degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	14,999	14,837	162	1,505	1,492	13	368	364	4
1951	12,165	12,020	145	1,568	1,540	28	379	376	3
1952	9,595	9,451	144	1,608	1,578	30	412	402	10
1953	8,825	8,674	151	1,470	1,438	32	473	468	5
1954	7,832	7,687	145	1,302	1,279	23	515	508	7
1955	7,170	7,052	118	1,364	1,336	28	507	499	8
1956	6,117	6,002	115	1,038	1,021	17	379	373	6
1957	6,619	6,465	154	1,122	1,103	19	341	331	10
1958	6,769	6,677	92	1,104	1,089	15	340	334	6
1959	6,767	6,692	75	1,183	1,166	17	376	368	8
1960	6,335	6,242	93	1,203	1,190	13	440	433	7
1961	5,717	5,647	70	1,241	1,212	29	450	443	7
1962	5,894	5,804	90	1,357	1,321	36	465	463	2
1963	6,063	5,951	112	1,261	1,232	29	449	441	8
1964	6,194	6,069	125	1,344	1,302	42	555	545	10
1965	6,770	6,600	170	1,366	1,330	36	529	516	13
1966	7,196	7,042	154	1,666	1,594	72	588	581	7
1967	7,889	7,712	177	1,761	1,687	74	637	625	12
1968	8,328	8,060	268	1,807	1,730	77	648	636	12
1969	9,995	9,594	401	2,073	1,974	99	699	687	12
1970	11,369	10,872	497	1,807	1,686	121	823	795	28
1971	11,531	11,003	528	2,040	1,910	130	874	846	28
1972	12,488	11,761	727	2,280	2,102	178	805	783	22
1973	13,838	12,751	1,087	2,391	2,188	203	869	848	21
1974	15,125	13,586	1,539	2,524	2,258	266	765	736	29
1975	16,531	14,103	2,428	2,687	2,349	338	832	801	31
1976	18,289	14,798	3,491	2,884	2,458	426	768	714	54
1977	20,199	15,538	4,661	3,239	2,740	499	753	699	54
1978	21,027	15,610	5,417	3,484	2,790	694	810	755	55
1979	21,631	15,540	6,091	3,499	2,749	750	804	743	61
1980	21,121	14,616	6,505	3,424	2,627	797	827	729	98

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 33. Biological sciences degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	24,102	19,336	4,766	2,653	2,132	521	665	574	91
1951	20,106	15,998	4,108	2,849	2,350	499	813	714	99
1952	15,636	11,975	3,661	2,576	2,139	437	775	691	84
1953	13,010	9,686	3,324	2,098	1,720	378	970	852	118
1954	13,752	10,392	3,360	1,705	1,370	335	1,113	1,009	104
1955	12,757	9,625	3,132	1,726	1,321	405	998	899	99
1956	13,773	10,506	3,267	1,829	1,440	389	1,025	908	117
1957	15,284	11,862	3,422	1,897	1,513	384	1,108	996	112
1958	16,300	12,722	3,578	2,075	1,632	443	1,125	987	138
1959	17,094	13,042	4,052	2,354	1,810	544	1,051	939	112
1960	17,806	13,408	4,398	2,548	1,988	560	1,207	1,088	119
1961	18,183	13,431	4,752	2,844	2,203	641	1,196	1,056	140
1962	19,306	13,926	5,380	3,315	2,566	749	1,339	1,180	159
1963	21,738	15,676	6,062	3,457	2,592	865	1,459	1,283	176
1964	25,417	18,329	7,088	4,013	2,971	1,042	1,626	1,433	193
1965	28,072	19,965	8,107	4,612	3,486	1,126	1,945	1,712	233
1966	29,668	21,358	8,310	5,000	3,692	1,308	2,108	1,801	307
1967	31,519	22,748	8,771	5,704	4,261	1,443	2,263	1,921	342
1968	34,932	25,109	9,823	6,508	4,721	1,787	2,797	2,357	440
1969	38,718	27,811	10,907	6,736	4,819	1,917	3,080	2,608	472
1970	40,760	29,382	11,378	6,783	4,688	2,095	3,308	2,837	471
1971	39,930	28,655	11,275	6,280	4,220	2,060	3,660	3,064	596
1972	40,996	29,029	11,967	6,634	4,485	2,149	3,673	3,048	625
1973	45,648	32,165	13,483	6,689	4,655	2,034	3,655	2,942	713
1974	53,101	36,804	16,297	7,081	4,937	2,144	3,455	2,752	703
1975	56,179	37,796	18,383	6,931	4,858	2,073	3,420	2,669	751
1976	59,012	38,714	20,298	6,939	4,746	2,193	3,435	2,698	737
1977	58,273	37,325	20,948	7,468	4,956	2,512	3,446	2,709	737
1978	56,111	34,574	21,537	7,227	4,695	2,532	3,369	2,552	817
1979	53,454	31,997	21,457	7,220	4,510	2,710	3,599	2,686	913
1980	50,496	29,405	21,091	6,854	4,325	2,529	3,668	2,716	952

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 34. Social sciences degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	39,469	29,540	9,929	3,784	2,932	852	782	692	90
1951	32,164	23,231	8,933	3,988	3,218	770	1,041	926	115
1952	27,765	18,985	8,780	3,413	2,734	679	1,141	1,012	129
1953	25,308	17,303	8,005	3,026	2,435	591	1,198	1,076	122
1954	24,493	16,434	8,059	3,108	2,433	675	1,298	1,174	124
1955	23,835	16,061	7,774	3,110	2,348	762	1,369	1,237	132
1956	25,186	17,194	7,992	2,917	2,303	614	1,411	1,263	148
1957	26,915	18,614	8,301	3,284	2,539	745	1,265	1,127	138
1958	29,050	20,548	8,502	3,605	2,815	790	1,339	1,190	149
1959	30,328	21,530	8,798	3,714	2,904	810	1,400	1,229	171
1960	31,494	21,909	9,585	3,950	3,139	811	1,482	1,309	173
1961	33,267	23,280	9,987	4,486	3,531	955	1,607	1,395	212
1962	37,030	25,541	11,489	4,956	3,855	1,101	1,720	1,495	225
1963	42,308	28,709	13,599	5,559	4,377	1,182	1,899	1,652	247
1964	50,320	33,664	16,656	5,917	4,567	1,350	2,100	1,820	280
1965	55,715	36,903	18,812	6,589	5,038	1,551	2,137	1,871	266
1966	63,424	41,587	21,837	7,737	5,857	1,880	2,452	2,088	364
1967	72,929	47,795	25,134	9,305	7,046	2,259	2,913	2,487	426
1968	87,774	56,128	31,646	10,333	7,780	2,553	3,175	2,675	500
1969	104,399	66,124	38,275	11,727	8,776	2,951	3,663	3,060	603
1970	116,561	73,381	43,180	12,076	8,543	3,533	4,171	3,501	670
1971	125,473	77,477	47,996	12,782	9,042	3,740	4,560	3,749	811
1972	133,604	82,060	51,544	14,358	10,074	4,284	4,832	3,968	864
1973	140,579	84,996	55,583	14,976	10,318	4,658	5,234	4,135	1,099
1974	145,449	85,453	59,996	15,974	10,881	5,093	5,449	4,186	1,263
1975	137,864	78,687	59,177	16,333	10,749	5,584	5,565	4,203	1,362
1976	132,451	73,903	58,548	16,803	10,454	6,359	5,717	4,208	1,509
1977	125,143	67,424	57,719	17,294	10,537	6,757	5,756	4,111	1,645
1978	120,518	63,006	57,512	16,514	9,584	6,930	5,437	3,778	1,659
1979	115,787	58,670	57,117	15,979	9,013	6,966	5,373	3,622	1,751
1980	114,779	56,313	58,466	15,519	8,427	7,092	5,410	3,526	1,884

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 35. Psychology degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	9,582	6,058	3,524	1,316	948	368	283	241	42
1951	7,819	4,836	2,983	1,645	1,250	395	425	368	57
1952	6,622	3,783	2,839	1,406	1,066	340	540	467	73
1953	5,946	3,330	2,616	1,161	896	265	583	504	79
1954	5,758	3,085	2,673	1,254	885	369	619	553	66
1955	5,532	3,009	2,523	1,293	876	417	688	604	84
1956	5,665	3,108	2,557	973	690	283	634	548	86
1957	6,191	3,525	2,666	1,095	763	332	550	460	90
1958	6,930	4,063	2,867	1,235	836	399	572	488	84
1959	7,383	4,477	2,906	1,254	857	397	635	537	98
1960	8,111	4,785	3,326	1,406	981	425	641	544	97
1961	8,524	5,093	3,431	1,719	1,176	543	703	567	136
1962	9,638	5,817	3,821	1,832	1,269	563	781	632	149
1963	11,062	6,505	4,557	1,918	1,345	573	844	700	144
1964	13,359	7,843	5,516	2,059	1,371	688	939	757	182
1965	14,721	8,688	6,033	2,241	1,509	732	847	688	159
1966	17,022	10,041	6,981	2,530	1,680	850	1,046	826	220
1967	19,496	11,690	7,806	3,138	2,076	1,062	1,231	999	232
1968	23,972	13,828	10,144	3,482	2,323	1,159	1,268	982	286
1969	29,495	16,776	12,719	4,013	2,686	1,327	1,551	1,195	356
1970	33,854	19,113	14,741	4,120	2,554	1,566	1,668	1,296	372
1971	38,154	21,117	17,037	4,438	2,787	1,651	1,782	1,355	427
1972	43,421	23,267	20,154	5,293	3,260	2,033	1,881	1,414	467
1973	48,096	25,110	22,986	5,882	3,515	2,367	2,089	1,484	605
1974	52,256	25,849	26,407	6,616	3,986	2,630	2,339	1,648	691
1975	51,436	24,333	27,103	7,104	4,059	3,045	2,442	1,688	754
1976	50,363	22,987	27,376	7,859	4,188	3,671	2,581	1,762	819
1977	47,794	20,692	27,102	8,320	4,316	4,004	2,761	1,770	991
1978	45,057	18,517	26,540	8,194	3,931	4,263	2,597	1,626	971
1979	43,012	16,649	26,363	8,031	3,688	4,343	2,674	1,603	1,071
1980	42,513	15,590	26,923	7,861	3,397	4,464	2,775	1,604	1,171

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 36. Economics degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	14,573	13,471	1,102	921	807	114	200	191	9
1951	10,484	9,579	905	809	738	71	236	219	17
1952	8,595	7,520	1,075	695	612	83	239	223	16
1953	7,313	6,545	768	582	521	61	222	214	8
1954	6,728	5,938	790	609	547	62	245	233	12
1955	6,364	5,678	686	617	539	78	241	232	9
1956	6,584	5,908	676	581	525	56	232	221	11
1957	6,878	6,214	664	606	556	50	236	227	9
1958	7,514	6,909	605	669	599	70	239	234	5
1959	7,723	7,079	644	664	604	60	221	211	10
1960	7,488	6,816	672	708	650	58	237	223	14
1961	7,939	7,313	626	820	753	67	266	253	13
1962	8,405	7,645	760	853	764	89	268	253	15
1963	9,399	8,485	914	1,029	947	82	331	311	20
1964	10,607	9,539	1,068	1,111	1,013	98	385	368	17
1965	10,895	9,856	1,039	1,268	1,118	150	410	393	17
1966	11,585	10,447	1,138	1,528	1,359	169	458	436	22
1967	13,058	11,727	1,331	1,778	1,610	168	546	509	37
1968	15,296	13,666	1,630	1,921	1,724	197	600	565	35
1969	16,907	15,108	1,799	2,113	1,871	242	634	591	43
1970	17,258	15,381	1,877	1,990	1,743	247	794	742	52
1971	15,958	14,046	1,912	1,997	1,735	262	721	668	53
1972	15,336	13,519	1,817	2,225	1,941	284	794	734	60
1973	14,867	12,808	2,059	2,231	1,948	283	845	793	52
1974	14,418	12,297	2,121	2,145	1,842	303	788	713	75
1975	14,118	11,679	2,439	2,133	1,808	325	815	742	73
1976	14,854	11,940	2,914	2,093	1,759	334	763	682	81
1977	15,342	11,815	3,527	2,166	1,783	383	758	672	86
1978	15,746	11,813	3,933	1,997	1,601	396	706	626	80
1979	16,534	11,979	4,555	1,960	1,568	392	712	619	93
1980	17,954	12,524	5,430	1,823	1,441	382	677	575	102

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 37. Political science and government degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	6,346	5,366	980	710	597	113	127	117	10
1951	5,582	4,698	884	657	567	90	152	143	9
1952	4,925	4,016	909	525	449	76	147	135	12
1953	5,086	4,112	974	509	433	76	164	152	12
1954	5,332	4,314	1,018	534	455	79	153	143	10
1955	5,500	4,415	1,085	498	414	84	181	171	10
1956	5,670	4,561	1,109	509	434	75	203	188	15
1957	5,874	4,765	1,109	535	467	68	156	149	7
1958	6,167	5,031	1,136	665	585	80	170	164	6
1959	6,387	5,223	1,164	649	539	110	191	176	15
1960	6,657	5,401	1,256	722	593	129	201	184	17
1961	7,149	5,704	1,445	764	652	112	217	204	13
1962	8,390	6,481	1,909	839	663	176	214	202	12
1963	10,138	7,835	2,303	1,051	867	184	228	215	13
1964	12,206	9,468	2,738	1,163	940	223	263	242	21
1965	13,693	10,655	3,038	1,210	980	230	304	278	26
1966	15,375	11,994	3,381	1,429	1,152	277	336	307	29
1967	17,733	13,813	3,920	1,775	1,388	387	390	352	38
1968	20,522	16,056	4,466	1,937	1,559	378	457	405	52
1969	23,920	18,951	4,969	2,108	1,703	405	467	418	49
1970	25,856	20,698	5,158	2,105	1,663	442	525	469	56
1971	27,636	22,072	5,564	2,318	1,839	479	700	615	85
1972	28,317	22,979	5,338	2,451	1,949	502	758	678	80
1973	30,246	24,327	5,919	2,399	1,919	480	747	652	95
1974	30,932	24,733	6,199	2,448	1,992	456	766	655	111
1975	29,314	22,704	6,610	2,333	1,857	476	680	569	111
1976	28,515	21,310	7,205	2,192	1,719	473	723	602	121
1977	26,576	19,079	7,497	2,223	1,719	504	641	541	100
1978	26,245	18,077	8,168	2,070	1,523	547	636	517	119
1979	25,817	17,197	8,620	2,038	1,480	558	563	464	99
1980	25,658	16,446	9,212	1,938	1,423	515	535	428	107

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 38. Sociology degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	7,887	3,848	4,039	552	373	179	98	80	18
1951	7,320	3,395	3,925	584	422	162	129	111	18
1952	6,697	2,986	3,711	517	386	131	141	121	20
1953	6,102	2,655	3,447	504	365	139	157	145	12
1954	5,702	2,387	3,315	440	323	117	184	156	28
1955	5,533	2,333	3,200	474	348	126	167	147	20
1956	5,916	2,553	3,363	402	275	127	170	141	29
1957	6,383	2,852	3,531	515	292	223	134	118	16
1958	6,583	2,977	3,606	397	258	139	150	122	28
1959	6,877	3,127	3,750	461	321	140	157	141	16
1960	7,182	3,171	4,011	440	327	113	161	135	26
1961	7,519	3,411	4,108	504	362	142	184	152	32
1962	8,183	3,629	4,554	578	422	156	173	147	26
1963	9,055	3,785	5,270	684	487	197	208	177	31
1964	11,053	4,466	6,587	646	466	180	198	169	29
1965	12,896	5,123	7,773	789	543	246	230	194	36
1966	15,203	6,139	9,064	981	680	301	244	208	36
1967	17,751	7,163	10,588	1,193	837	356	327	268	59
1968	22,062	8,577	13,485	1,193	790	403	367	299	68
1969	26,555	10,342	16,213	1,656	1,125	531	430	344	86
1970	30,848	12,445	18,403	1,816	1,139	677	534	430	104
1971	33,662	13,703	19,959	1,809	1,132	677	574	455	119
1972	35,626	15,332	20,294	1,945	1,191	754	636	500	136
1973	35,994	15,745	20,249	1,923	1,146	777	583	429	154
1974	35,896	15,314	20,582	2,196	1,327	869	632	455	177
1975	31,817	13,330	18,487	2,112	1,304	808	693	484	209
1976	27,970	11,379	16,591	2,010	1,166	844	729	511	218
1977	24,989	9,802	15,187	1,830	1,018	812	714	480	234
1978	22,991	8,423	14,568	1,611	878	733	599	376	223
1979	20,545	7,155	13,390	1,415	745	670	612	391	221
1980	19,164	6,383	12,781	1,341	667	674	583	355	228

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 39. Other social sciences degrees by level and sex: 1950–80

Year	Bachelor's and first-professional			Master's			Doctor's		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1950	1,081	797	284	285	207	78	74	63	11
1951	959	723	236	293	241	52	99	85	14
1952	926	680	246	270	221	49	74	66	8
1953	861	661	200	270	220	50	72	61	11
1954	973	710	263	271	223	48	97	89	8
1955	906	626	280	228	171	57	92	83	9
1956	1,351	1,064	287	452	379	73	172	165	7
1957	1,589	1,258	331	533	461	72	189	173	16
1958	1,856	1,568	288	639	537	102	208	182	26
1959	1,958	1,624	334	686	583	103	196	164	32
1960	2,056	1,736	320	674	588	86	242	223	19
1961	2,136	1,759	377	679	588	91	237	219	18
1962	2,414	1,969	445	854	737	117	284	261	23
1963	2,654	2,099	555	877	731	146	288	249	39
1964	3,095	2,348	747	938	777	161	315	284	31
1965	3,510	2,581	929	1,081	888	193	346	318	28
1966	4,239	2,966	1,273	1,269	986	283	368	311	57
1967	4,891	3,402	1,489	1,421	1,135	286	419	359	60
1968	5,922	4,001	1,921	1,800	1,384	416	483	424	59
1969	7,522	4,947	2,575	1,837	1,391	446	581	512	69
1970	8,745	5,744	3,001	2,045	1,444	601	650	564	86
1971	10,063	6,539	3,524	2,220	1,549	671	783	656	127
1972	10,904	6,963	3,941	2,444	1,733	711	763	642	121
1973	11,376	7,006	4,370	2,541	1,790	751	970	777	193
1974	11,947	7,260	4,687	2,569	1,734	835	924	715	209
1975	11,179	6,641	4,538	2,651	1,721	930	935	720	215
1976	10,749	6,287	4,462	2,649	1,622	1,027	921	651	270
1977	10,442	6,036	4,406	2,755	1,701	1,054	882	648	234
1978	10,479	6,176	4,303	2,642	1,651	991	899	633	266
1979	9,879	5,690	4,189	2,535	1,532	1,003	812	545	267
1980	9,490	5,370	4,120	2,556	1,499	1,057	840	564	276

SOURCES: National Science Foundation and National Center for Education Statistics, Department of Education

Table 40. Science/engineering baccalaureate and first-professional degrees per thousand 22-year-olds in the U.S. population: 1950–80

Year	Total			Men			Women		
	22-year-olds (thousands)	Degrees	Degrees per thousand	22-year-olds (thousands)	Degrees	Degrees per thousand	22-year-olds (thousands)	Degrees	Degrees per thousand
1950	2,325	154,933	67	1,151	136,718	119	1,173	18,215	16
1951	2,258	125,957	56	1,119	109,822	98	1,139	16,135	14
1952	2,255	100,411	45	1,123	85,102	76	1,131	15,309	14
1953	2,224	86,142	39	1,112	72,074	65	1,112	14,068	13
1954	2,140	82,376	38	1,065	68,106	64	1,075	14,270	13
1955	2,066	80,901	39	1,027	67,123	65	1,039	13,778	13
1956	2,045	87,720	43	1,019	73,246	72	1,026	14,474	14
1957	2,151	98,509	46	1,074	83,218	77	1,077	15,291	14
1958	2,129	108,727	51	1,061	92,806	87	1,067	15,921	15
1959	2,138	116,802	55	1,062	99,475	94	1,076	17,327	16
1960	2,239	120,937	54	1,119	101,575	91	1,120	19,362	17
1961	2,277	121,660	53	1,136	101,065	89	1,141	20,595	18
1962	2,323	127,469	55	1,160	103,984	90	1,163	23,485	20
1963	2,465	135,964	55	1,235	108,865	88	1,231	27,099	22
1964	2,618	153,361	59	1,312	120,888	92	1,307	32,473	25
1965	2,974	164,936	55	1,493	128,723	86	1,481	36,213	24
1966	2,814	173,471	62	1,411	133,989	95	1,403	39,482	28
1967	2,777	187,849	68	1,393	143,847	103	1,384	44,002	32
1968	2,747	212,174	77	1,378	158,711	115	1,369	53,463	39
1969	3,761	244,519	65	1,894	181,323	96	1,867	63,196	34
1970	3,491	264,122	76	1,755	195,244	111	1,735	68,878	40
1971	3,494	271,176	78	1,752	198,180	113	1,743	72,996	42
1972	3,485	281,228	81	1,748	203,557	116	1,737	77,671	45
1973	3,615	295,391	82	1,818	211,552	116	1,798	83,839	47
1974	3,704	305,062	82	1,864	213,269	114	1,840	91,793	50
1975	3,796	294,920	78	1,909	201,578	106	1,887	93,342	49
1976	3,890	292,174	75	1,955	196,577	101	1,936	95,597	49
1977	3,961	288,543	73	1,993	191,090	96	1,969	97,453	49
1978	4,012	288,167	72	2,018	188,107	93	1,994	100,060	50
1979	4,156	288,625	69	2,093	186,333	89	2,064	102,292	50
1980	4,168	291,983	70	2,095	186,009	89	2,073	105,974	51

SOURCES: National Science Foundation, National Center for Education Statistics, Department of Education, and Bureau of the Census, Department of Commerce

Table 41. Science/engineering master's degrees per thousand 24-year-olds in the U.S. population: 1950–80

Year	Total			Men			Women		
	24-year-olds (thousands)	Degrees	Degrees per thousand	24-year-olds (thousands)	Degrees	Degrees per thousand	24-year-olds (thousands)	Degrees	Degrees per thousand
1950	2,413	16,596	6.9	1,191	14,740	12.4	1,222	1,856	1.5
1951	2,397	17,539	7.3	1,188	15,826	13.3	1,210	1,713	1.4
1952	2,389	15,544	6.5	1,186	14,017	11.8	1,203	1,527	1.3
1953	2,313	13,548	5.9	1,148	12,258	10.7	1,166	1,290	1.1
1954	2,305	13,399	5.8	1,150	12,047	10.5	1,155	1,352	1.2
1955	2,272	13,989	6.2	1,139	12,426	10.9	1,134	1,563	1.4
1956	2,187	14,061	6.4	1,091	12,623	11.6	1,096	1,438	1.3
1957	2,109	15,205	7.2	1,051	13,632	13.0	1,058	1,573	1.5
1958	2,081	16,840	8.1	1,038	15,061	14.5	1,042	1,779	1.7
1959	2,182	18,682	8.6	1,092	16,706	15.3	1,091	1,976	1.8
1960	2,160	20,012	9.3	1,079	17,938	16.6	1,081	2,074	1.9
1961	2,191	22,786	10.4	1,093	20,322	18.6	1,098	2,464	2.2
1962	2,270	25,146	11.1	1,130	22,334	19.8	1,140	2,812	2.5
1963	2,310	27,367	11.8	1,147	24,173	21.1	1,163	3,194	2.7
1964	2,359	30,271	12.8	1,171	26,704	22.8	1,188	3,567	3.0
1965	2,506	33,835	13.5	1,248	29,753	23.8	1,258	4,082	3.2
1966	2,664	38,083	14.3	1,328	33,201	25.0	1,336	4,882	3.7
1967	3,023	41,800	13.8	1,507	36,083	23.9	1,516	5,717	3.8
1968	2,861	45,425	15.9	1,422	38,913	27.4	1,439	6,512	4.5
1969	2,824	48,425	17.1	1,403	41,111	29.3	1,421	7,314	5.1
1970	2,779	49,318	17.7	1,387	40,741	29.3	1,392	8,577	6.2
1971	3,827	50,624	13.2	1,911	41,966	22.0	1,916	8,658	4.5
1972	3,548	53,567	15.1	1,767	44,010	24.9	1,780	9,557	5.4
1973	3,553	54,234	15.3	1,766	44,474	25.2	1,787	9,760	5.5
1974	3,542	54,175	15.3	1,761	43,630	24.8	1,780	10,545	5.9
1975	3,674	53,852	14.7	1,832	42,847	23.4	1,842	11,005	6.0
1976	3,765	54,747	14.5	1,879	42,675	22.7	1,886	12,072	6.4
1977	3,856	56,731	14.7	1,923	43,577	22.7	1,933	13,154	6.8
1978	3,953	56,237	14.2	1,969	42,547	21.6	1,984	13,690	6.9
1979	4,027	54,456	13.5	2,008	40,416	20.1	2,019	14,040	7.0
1980	4,080	54,391	13.3	2,033	40,008	19.7	2,047	14,383	7.0

SOURCES: National Science Foundation, National Center for Education Statistics, Department of Education, and Bureau of the Census, Department of Commerce

Table 42. Science/engineering doctor's degrees per thousand 30-year-olds in the U.S. population: 1950–80

Year	Total			Men			Women		
	30-year-olds (thousands)	Degrees	Degrees per thousand	30-year-olds (thousands)	Degrees	Degrees per thousand	30-year-olds (thousands)	Degrees	Degrees per thousand
1950	2,416	3,890	1.6	1,186	3,646	3.1	1,230	244	0.2
1951	2,502	4,618	1.8	1,227	4,327	3.5	1,274	291	.2
1952	2,531	4,783	1.9	1,242	4,489	3.6	1,289	294	.2
1953	2,448	5,114	2.1	1,198	4,792	4.0	1,250	322	.3
1954	2,482	5,433	2.2	1,218	5,123	4.2	1,264	310	.2
1955	2,470	5,436	2.2	1,213	5,134	4.2	1,257	302	.2
1956	2,414	5,327	2.2	1,187	4,978	4.2	1,227	349	.3
1957	2,399	5,233	2.2	1,182	4,888	4.1	1,217	345	.3
1958	2,388	5,353	2.2	1,177	4,975	4.2	1,211	378	.3
1959	2,315	5,635	2.4	1,139	5,259	4.6	1,176	376	.3
1960	2,311	6,056	2.6	1,142	5,674	5.0	1,169	382	.3
1961	2,293	6,531	2.8	1,136	6,082	5.4	1,157	449	.4
1962	2,266	7,249	3.2	1,126	6,748	6.0	1,139	501	.4
1963	2,222	8,055	3.6	1,105	7,482	6.8	1,117	573	.5
1964	2,187	9,025	4.1	1,086	8,393	7.7	1,101	632	.6
1965	2,260	10,252	4.5	1,121	9,543	8.5	1,139	709	.6
1966	2,274	11,298	5.0	1,128	10,423	9.2	1,146	875	.8
1967	2,311	12,759	5.5	1,144	11,746	10.3	1,167	1,013	.9
1968	2,398	14,128	5.9	1,186	12,924	10.9	1,213	1,204	1.0
1969	2,444	15,839	6.5	1,207	14,464	12.0	1,237	1,375	1.1
1970	2,486	17,639	7.1	1,231	16,112	13.1	1,255	1,527	1.2
1971	2,627	18,466	7.0	1,303	16,666	12.8	1,324	1,800	1.4
1972	2,789	18,412	6.6	1,384	16,502	11.9	1,405	1,910	1.4
1973	3,167	18,598	5.9	1,572	16,310	10.4	1,594	2,288	1.4
1974	2,995	17,865	6.0	1,484	15,453	10.4	1,511	2,412	1.6
1975	2,952	17,784	6.0	1,464	15,147	10.3	1,487	2,637	1.8
1976	2,896	17,288	6.0	1,442	14,502	10.1	1,454	2,786	1.9
1977	3,970	16,937	4.3	1,981	13,979	7.1	1,989	2,958	1.5
1978	3,690	16,196	4.4	1,836	13,157	7.2	1,854	3,039	1.6
1979	3,697	16,363	4.4	1,834	13,053	7.1	1,863	3,310	1.8
1980	3,685	16,483	4.5	1,832	12,940	7.1	1,853	3,543	1.9

SOURCES: National Science Foundation, National Center for Education Statistics, Department of Education, and Bureau of the Census, Department of Commerce

appendix

technical notes

appendix

technical notes

degree data

The degree data used in this publication were collected and published by NCES, U.S. Department of Education, and its predecessors. Degree data are currently collected as a part of the NCES Higher Education General Information Survey (HEGIS). The following describes the degree levels and fields of study used in that survey.

DEGREE LEVELS

Bachelor's degrees require successful completion of at least 4 but not more than 5 years of academic work beyond high school.

First-professional degrees (1) signify completion of the academic requirements to begin practice in the profession, (2) are based on a program which requires at least 2 years of college prior to entrance, and (3) require a total of at least 6 academic years of college, including prior required college work plus the length of the professional curriculum.

Master's degrees require successful completion of at least 1 year—and sometimes 2 years—of work beyond the bachelor's degree.

Doctor's degrees include such earned degrees as Doctor of Education, Doctor of Juridicial Science, Doctor of Public Health, and Doctor of Philosophy (Ph. D.) in any field.

FIELDS OF STUDY

In the collection of data for the years 1970-71 (1971) through 1979-80 (1980) NCES used consistent survey definitions and classifications based on the field definitions described in "A Taxonomy of Instructional Programs in Higher Education," National Center for Education Statistics, U.S. Department of Health, Education, and Welfare, OE-50064. Where appropriate, the NCES data have been classified according to NSF field categories. The S/E field categories used in this publication are outlined below in terms of the NCES disciplines and codes.

PHYSICAL SCIENCES

Physics

1902 Physics, general (exclude biophysics)
1903 Molecular physics
1904 Nuclear physics

Chemistry

1905 Chemistry, general (exclude biochemistry)
1906 Inorganic chemistry
1907 Organic chemistry
1908 Physical chemistry
1909 Analytical chemistry
1910 Pharmaceutical chemistry

Geological sciences

1914 Geology
1915 Geochemistry
1916 Geophysics and seismology

Other physical sciences

1901 Physical sciences, general
1911 Astronomy
1912 Astrophysics
1913 Atmospheric sciences and meteorology
1917 Earth sciences, general
1918 Paleontology
1919 Oceanography
1920 Metallurgy
1999 Other

ENGINEERING

Aeronautical and astronautical

0902 Aeronautical and astronautical

Chemical engineering

0906 Chemical engineering (including petroleum refining)

Civil, construction, and transportation engineering

0908 Civil, construction, and transportation engineering

Electrical, electronics, and communications engineering

0909 Electrical, electronics, and communications engineering

Industrial and management engineering

0913 Industrial and management engineering

Mechanical engineering

0910 Mechnical engineering

Other engineering

0901 Engineering, general
0903 Agricultural engineering
0904 Architectural engineering
0905 Bioengineering and biomedical engineering
0907 Petroleum engineering (exclude petroleum refining)
0911 Geological engineering
0912 Geophysical engineering
0914 Metallurgical engineering
0915 Materials engineering
0916 Ceramic engineeering
0917 Textile engineering
0918 Mining and mineral engineering
0919 Engineering physics
0920 Nuclear engineering
0921 Engineering mechanics
0922 Environmental and sanitary engineering
0923 Naval architecture and marine engineering
0924 Ocean engineering
0999 Other
4904 Engineering and other disciplines

MATHEMATICAL/COMPUTER SCIENCES

Mathematics

1701 Mathematics, general
1702 Statistics, mathematical and theoretical
1703 Applied mathematics
1799 Other

Computer and information sciences

0701 Computer and information sciences, general
0702 Information sciences and systems
0703 Data processing
0704 Computer programming
0705 Systems analysis
0799 Other

LIFE SCIENCES

Agriculture and natural resources

0101 Agriculture, general
0102 Agronomy (field crops, and crop management)
0103 Soils science (management and conservation)
0104 Animal science (husbandry)
0105 Dairy science (husbandry)
0106 Poultry science
0107 Fish, game, and wildlife management
0108 Horticulture (fruit and vegetable production)
0109 Ornamental horticulture (floriculture, nursery science)
0110 Agricultural and farm management
0112 Agricultural business
0113 Food science and technology
0114 Forestry
0115 Natural resources management
0116 Agriculture and forestry technologies (baccalaureate and higher programs)
0117 Range management
0199 Other

Biological sciences

0401 Biology, general
0402 Botany, general
0403 Bacteriology
0404 Plant pathology
0405 Plant pharmacology
0406 Plant physiology
0407 Zoology, general
0408 Pathology, human and animal
0409 Pharmacology, human and animal
0410 Physiology, human and animal
0411 Microbiology
0412 Anatomy
0413 Histology
0414 Biochemistry
0415 Biophysics
0416 Molecular biology
0417 Cell biology (cytology, cell physiology)
0418 Marine biology

0419 Biometrics and biostatistics
0420 Ecology
0421 Entomology
0422 Genetics
0423 Radiobiology
0424 Nutrition, scientific (excludes nutrition in home economics and dietetics)
0425 Neurosciences
0426 Toxicology
0427 Embryology
4902 Biological and physical sciences

SOCIAL SCIENCES

Psychology

2001 Psychology, general
2002 Experimental psychology (animal and human)
2003 Clinical psychology
2004 Psychology for counseling
2005 Social psychology
2006 Psychometrics
2007 Statistics in psychology
2008 Industrial psychology
2009 Developmental psychology
2010 Physiological psychology
2099 Other

Economics

2204 Economics

Political science and government

2207 Political science and government

Sociology

2208 Sociology

Other social sciences

2202 Anthropology
2203 Archaeology
2206 Geography
2215 Demography
0111 Agricultural economics
1505 Linguistics

The data for the years 1950 through 1970 are presented as consistently as possible with the classifications used for 1971 through 1980. During the years 1953 through 1964 the regular earned degree survey collected the total number of engineering degrees but without detailed engineering disciplines. Separate surveys in those years collected engineering enrollment and degree data by engineering specialties but in some years the totals differed slightly from the engineering total in the regular earned degree survey. The degree data for years 1953 through 1964 from the separate surveys were used in the tables on engineering specialties without adjustment (tables 21-27).

A revision of the NCES definition and survey instrument in 1968 eliminated the classification of any S/E degrees as first-professional degrees. A relatively small number of S/E degrees classified as first-professional degrees are combined with bachelor's degrees prior to 1968. First-professional degrees are included in the totals for all fields through 1980 for consistency.

population data

Estimates of population in the various age classifications were published by the Bureau of the Census, U.S. Department of Commerce. The basic document used was *Current Population Reports*, "Population Estimates, Estimates of the Population of the U.S. by Single Years of Age, Color, and Sex, 1900 to 1959," Series P-25, No. 311, July 1965. Additional Bureau of the Census publications in the P-25 series were used as follows: No. 519, April 1974; No. 704, July 1977; and No. 870, January 1980. [Washington, D.C.: Supt. of Documents, U.S. Government Printing Office.]

other science resources publications

Science Resources Studies Highlights

	NSF No.	Price
R&D Funds		
"1980 Federal Obligations to Universities and Colleges Rose Slightly in Constant Dollars"	82-301	-----
"Industrial R&D Expenditures in 1980 Show Real Growth for Fifth Consecutive Year"	81-331	-----
"Total Federal R&D Funding Estimated to Increase 7 Percent in 1982 After September Revisions"	81-321	-----
"R&D Expenditures Increased 3% in Real Terms at Universities and Colleges in FY 1979"	81-304	-----
S/E Personnel		
"Engineering Colleges Report 10% of Faculty Positions Vacant in Fall 1980"	81-322	-----
"Science and Engineering Faculty With Recent Doctorates Fell to One-Fifth of Total in 1980"	81-318	-----
"University S/E Faculty Spent One-Third of Professional Time in Research"	81-317	-----
"Academic Employment of Scientists and Engineers Increased 6% Between 1978 and 1980"	81-315	-----
"Employment Opportunities for Ph. D. Scientists and Engineers Shift from Academia to Industry"	81-312	-----
"Tenure Practices in Universities and 4-Year Colleges Affect Faculty Turnover"	81-300	-----
Composite		
"National R&D Spending Expected to Approach $80 Billion in 1982"	81-314	-----
"National R&D Spending Expected to Reach $67 Billion in 1981"	80-310	-----

Detailed Statistical Tables

	NSF No.	Price
R&D Funds		
Academic Science: R&D Funds, Fiscal Year 1980	82-300	-----
Federal Funds for Research and Development, Fiscal Years 1980, 1981, and 1982, Volume XXX	81-325	-----
Research and Development in Industry, 1979	81-324	-----
S/E Personnel		
Academic Science: Scientists and Engineers, January 1981	82-305	-----
Research and Development in Industry, 1979	82-304	-----
Employment of Scientists, Engineers, and Technicians in Private Industry, 1980	81-329	-----

Reports

	NSF No.	Price
R&D Funds		
Federal Support to Universities, Colleges, and Selected Nonprofit Institutions, Fiscal Year 1979	81-308	$5.50
Federal Funds for Research and Development, Fiscal Years 1979, 1980, and 1981, Volume XXIX	81-306	$3.75
Problems of Small, High-Technology Firms	81-305	-----
S/E Personnel		
Activities of Science and Engineering Faculty in Universities and 4-Year Colleges, 1978/79	81-323	In press
Young and Senior Science and Engineering Faculty, 1980	81-319	-----
Science and Engineering Employment: 1970-80	81-310	$2.75
Composite		
National Patterns of Science and Technology Resources, 1981	81-311	$4.75